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PROPOSED

Farmington

Resource Management Plan



FINAL ENVIRONMENTAL IMPACT STATEMENT

SEPTEMBER 1987



U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ALBUQUERQUE DISTRICT
FARMINGTON RESOURCE AREA

BLM-NM-PT-87-014-4410

NOTICE

This is the Proposed Resource Management Plan/Final Environmental Impact Statement for the Farmington Resource Area. This Proposed RMP/Final EIS incorporates portions of the Draft RMP/EIS by reference and includes a summary of the Draft, the Proposed Plan, a record of public comment on the Draft and the responses to those comments. All substantive changes to the Draft are either printed in italics or itemized in the "Modifications and Corrections to the Draft RMP/EIS" section of this document. A limited number of copies of the Draft RMP/EIS are available from the BLM Farmington Resource Area, 900 La Plata Highway, Caller Service 4104, Farmington, New Mexico 87499-4104.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA

Caller Service 4104
Farmington, New Mexico 87499

September 1987

Dear Reader:

Enclosed for your review is the Proposed Farmington Resource Management Plan (RMP)/Final Environmental Impact Statement (EIS). This document analyzes the impacts of managing the public land in the Farmington Resource Area in San Juan County, most of McKinley County, western Rio Arriba County, and northwestern Sandoval County, New Mexico.

This document contains the Proposed Plan which is a modified version of the Preferred Alternative published in the Draft RMP/EIS in March 1987. All parts of the Proposed Plan may be protested. Protests must be sent to the Director (760), Bureau of Land Management, Room 909, Premier Bldg., 18th and C Streets NW, Washington, D.C. 20240, within thirty days. The protest must include the following information: (1) name, mailing address, telephone number, and interest of the person filing the protest; (2) a statement of the issue or issues being protested; (3) a statement of the part or parts being protested; (4) a copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the records; and (5) a concise statement explaining why the BLM New Mexico State Director's decision is wrong.

At the end of the thirty-day protest period, the Proposed Plan, excluding any portions under protest, will become final. Approval will be withheld on any portion of the plan under protest until final action has been completed on such protest. The approval process and the Approved Plan will be published with the Record of Decision. Individuals not wishing to protest the plan, but wanting to comment may send comments to the BLM, Farmington Resource Area, at the address on this letterhead. All comments received will be considered in preparation of the Record of Decision.

This Proposed RMP/Final EIS was prepared using the comments received through the public review process on the Draft RMP/EIS. Portions of the draft are reprinted in whole in this document with substantive changes printed in italics. Other sections are incorporated into this Proposed RMP/EIS by reference and changes are documented in the Modification and Corrections to Draft section. A limited number of copies of the Draft are still available from the BLM, Farmington Resource Area, 900 La Plata Highway, Caller Service 4104, Farmington, N.M. 87499-4104.

Sincerely,

Ron Fellows
Farmington Resource Area
Manager

Farmington Resource Management Plan And Environmental Impact Statement

Draft () Final (X)

The United States Department of the Interior, Bureau of Land Management

1. Type of Action: Administrative (X) Legislative ()
2. Abstract: This Proposed Resource Management Plan and Final Environmental Impact Statement describes and analyzes the Proposed Farmington Resource Management Plan for managing the public lands and resources in the Farmington Resource Area, New Mexico. The Proposed Plan is the Preferred Alternative from the Draft, slightly modified.
3. For further information, contact:

Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

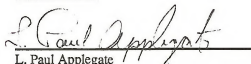
Telephone: (505) 325-3581 (FTS 476-6465)

Partial Draft & Final distribution list: See Table 4-3.

Date filed with Environmental Protection Agency: Sept. 16, 1987.

Date by which protest must be postmarked: Oct. 26, 1987.

Recommended:



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District Manager
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Approved:



Larry Woodard
State Director
New Mexico State Office

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PROPOSED

FARMINGTON RESOURCE

MANAGEMENT PLAN

AND

FINAL

ENVIRONMENTAL

IMPACT STATEMENT

SEPTEMBER 1987

PREPARED BY:
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Table of Contents

Summary	S-1
Modifications & Corrections to Draft	M&C-1
Introduction	i-1
Background	i-1
Location	i-1
The Planning Process	i-3
Planning Issues	i-5
Issue #1 – Land Ownership Adjustments	i-5
Issue #2 – Home Use Fuel Sources	i-6
Issue #3 – Special Management Areas	i-7
Issue #4 – Coal Leasing Suitability Assessment	i-7
Issue #5 – Transportation	i-7
Issue #6 – Vegetative Uses	i-8
Issue #7 – Right-of-Way Corridors and Windows	i-8
Chapter 1 - Continuing Management Guidance	
Introduction	1-1
Minerals	1-2
Rangeland	1-3
Lands	1-7
Forestry	1-10
Soils	1-11
Hydrology	1-11
Air Quality	1-12
Scenic Quality	1-13
Fire	1-13
Wildlife	1-14
Wilderness	1-16
Cultural Resources	1-16
Paleontology	1-18
Outdoor Recreation	1-19
Chapter 2 - Proposed Resource Management Plan	
Introduction	2-1
How the Plan was Selected	2-1
Issue #1 - Land Ownership Adjustments	2-2
Issue #2 - Home Use Fuel Sources	2-4
Issue #3 - Special Management Areas	2-5
Issue #4 - Coal Leasing Suitability Assessment	2-7
Issue #5 - Transportation	2-8
Issue #6 - Vegetative Uses	2-10
Issue #7 - Right-of-Way Corridors and Windows	2-12

Chapter 3 - Environmental Impact Statement

Purpose and Need	3-1
Description of Alternatives Including the Proposed Action	3-2
Alternative A - Current Management (No Action)	3-2
Alternative B - Resource Conservation	3-4
Alternative C - Resource Production	3-11
Alternative D - Preferred Alternative	3-14
Affected Environment	3-18
Introduction	3-18
Topography	3-18
Climate	3-18
Minerals	3-18
Vegetation	3-21
Livestock Grazing	3-21
Lands	3-22
Forestry	3-24
Soils	3-24
Hydrology	3-25
Air Quality	3-26
Scenic Quality	3-27
Fire	3-28
Wildlife	3-28
Wilderness	3-30
Cultural Resources	3-33
Paleontology	3-35
Outdoor Recreation	3-36
Social and Economic Conditions	3-38
Environmental Consequences	3-40

Chapter 4 - Consultation & Coordination

Procedure	4-1
Record of Decision	4-1
Protest Process	4-5
Formal Consultation	4-5
Public Involvement	4-6
Responses to Letters and Testimony	4-11

Appendices

Appendix 1 - Special Management Areas	A1-1
Dunes Vehicle Recreation Area	A1-4
Head Canyon ORV Competition Area	A1-6
Simon Canyon Recreation Area	A1-8
Angel Peak Recreation Area	A1-10
Carracas Mesa	A1-12
Thomas Canyon	A1-14
Negro Canyon	A1-16
Glade Run Trail System	A1-18
Continental Divide Corridor	A1-20
Bisti Wilderness	A1-22
De-na-zin Wilderness	A1-24
Ah-shi-sle-pah Wilderness Study Area	A1-26
Navajo Refugee Sites (26)	A1-28
Native American Traditional Use and Sacred Areas (4)	A1-32

East Side Rincon Site	A1-34
Chaco Outliers Group (8)	A1-36
Chacra Mesa Complex	A1-40
Farmer's Arroyo Site	A1-42
Laguna Seca Mesa	A1-44
Beechatuda Tongue	A1-46
Coal Belt	A1-48
Right-of-Way Windows (4)	A1-50
The Hogback ACEC	A1-52
Reese Canyon RNA	A1-54
Aztec Gilia ACEC	A1-56
River Tracts	A1-58
Bald Eagle ACEC	A1-60
Torreon Fossil Fauna ACEC	A1-62
Kutz Canyon Paleontological Area	A1-64
Betonne Tsosie	A1-66
Fossil Forest Research Natural Area	A1-68
Farmington Lake Watershed	A1-70
Appendix 2 - Land Ownership Adjustments & Easement Acquisitions	A2-1
Appendix 3 - Implementation of ORV Designations	A3-1
Appendix 4 - Right-of-Way Windows Concept	A4-1
Glossary	GL-1
References	R-1
Index	X-1

List of Maps, Tables and Figures

MAPS

Introduction	
Map i-1 – Farmington Resource Management Planning Area	i-2
Chapter 1	
Map 1-1 – Chaco Rangeland Management Area.....	1-5
Chapter 2	
Map 2-1 – Land Ownership Adjustments.....	2-3
Chapter 3	
Map 3-1 – Land Ownership Adjustments (Alternative B)	3-8
Map 3-2 – Land Ownership Adjustments (Alternative C)	3-12
Map 3-3 – Land Ownership Adjustments (Alternative D).....	3-15
Appendices	
Map A-1 – Dunes Vehicle Recreation Area.....	A1-5
Map A-2 – Head Canyon ORV Competition Area	A1-7
Map A-3 – Simon Canyon Recreation Area.....	A1-9
Map A-4 – Angel Peak Recreation Area.....	A1-11
Map A-5 – Carracas Mesa	A1-13
Map A-6 – Thomas Canyon	A1-15
Map A-7 – Negro Canyon	A1-17
Map A-8 – Glade Run Trail System.....	A1-19
Map A-9 – Continental Divide Corridor	A1-21
Map A-10 – Bisti Wilderness	A1-23
Map A-11 – De-na-zin Wilderness	A1-25
Map A-12 – Ah-shi-sle-pah Wilderness Study Area.....	A1-27
Map A-13 – Navajo Refugee Sites	A1-31
Map A-14 – Native American Traditional Use and Sacred Areas	A1-33
Map A-15 – East Side Rincon Site.....	A1-35
Map A-16 – Chaco Outliers Group	A1-39
Map A-17 – Chacra Mesa Complex.....	A1-41
Map A-18 – Farmer's Arroyo Site	A1-43
Map A-19 – Laguna Seca Mesa	A1-45
Map A-20 – Beechatuda Tongue	A1-47
Map A-21 – Coal Belt	A1-49
Map A-22 – Right-of-Way Windows	A1-51
Map A-23 – The Hogback ACEC	A1-53
Map A-24 – Reese Canyon RNA	A1-55
Map A-25 – Aztec Gila ACEC.....	A1-57
Map A-26 – River Tracts.....	A1-59

Map A-27 – Bald Eagle ACEC	A1-61
Map A-28 – Torrejon Fossil Fauna ACEC.....	A1-63
Map A-29 – Kutz Canyon Paleontological Area	A1-65
Map A-30 – Bettonnie Tsosie.....	A1-67
Map A-31 – Fossil Forest Research Natural Area	A1-69
Map A-32 – Farmington Lake Watershed	A1-71

TABLES

Modifications and Corrections

Table P-Add – Summary of Royalties Paid	M&C-4
---	-------

Chapter 1

Table 1-1 – Cooperative Agreements Relating to Wildlife.....	1-15
Table 1-2 – Summary of Management Framework Decisions.....	1-21

Chapter 2

Table 2-1 – Special Management Areas.....	2-6
Table 2-2 – Proposed ORV Designations.....	2-9
Table 2-3 – Summary of Estimated Changes in AUMs.....	2-11

Chapter 3

Table 3-1 – Coal Tracts Carried Forward by Alternative	3-3
Table 3-2 – Estimated Short- and Long-Term AUMs for Allotments by Alternative.....	3-5
Table 3-3 – Summary of Estimated Changes in AUMs by Alternative.....	3-7
Table 3-4 – Exchange Areas by Alternative.....	3-9
Table 3-5 – Special Management Areas - Alternative B	3-9
Table 3-6 – ORV Designations - Alternative B	3-10
Table 3-7 – SMAs to be Retained in Exchange Zone of Alternative C	3-11
Table 3-8 – ORV Designations - Alternative C	3-13
Table 3-9 – Special Management areas - Alternative D	3-16
Table 3-10 – ORV Designations - Alternative D	3-16
Table 3-11 – Federal and State Listed Species	3-30
Table 3-12 – Acres Inventoried for Cultural Resources.....	3-34
Table 3-13 – Navajo Livestock Budget	3-39
Table 3-14 – Environmental Consequences Anticipated Per Alternative	3-41

Chapter 4

Table 4-1 – List of Preparers.....	4-2
Table 4-2 – Public Hearing Summary	4-7
Table 4-3 – Partial Distribution List.....	4-8
Table 4-4 – Survey of Public Response to Plan	4-10

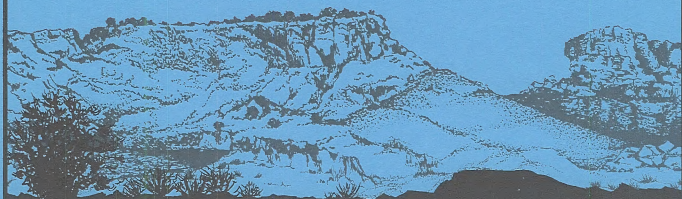
Appendices

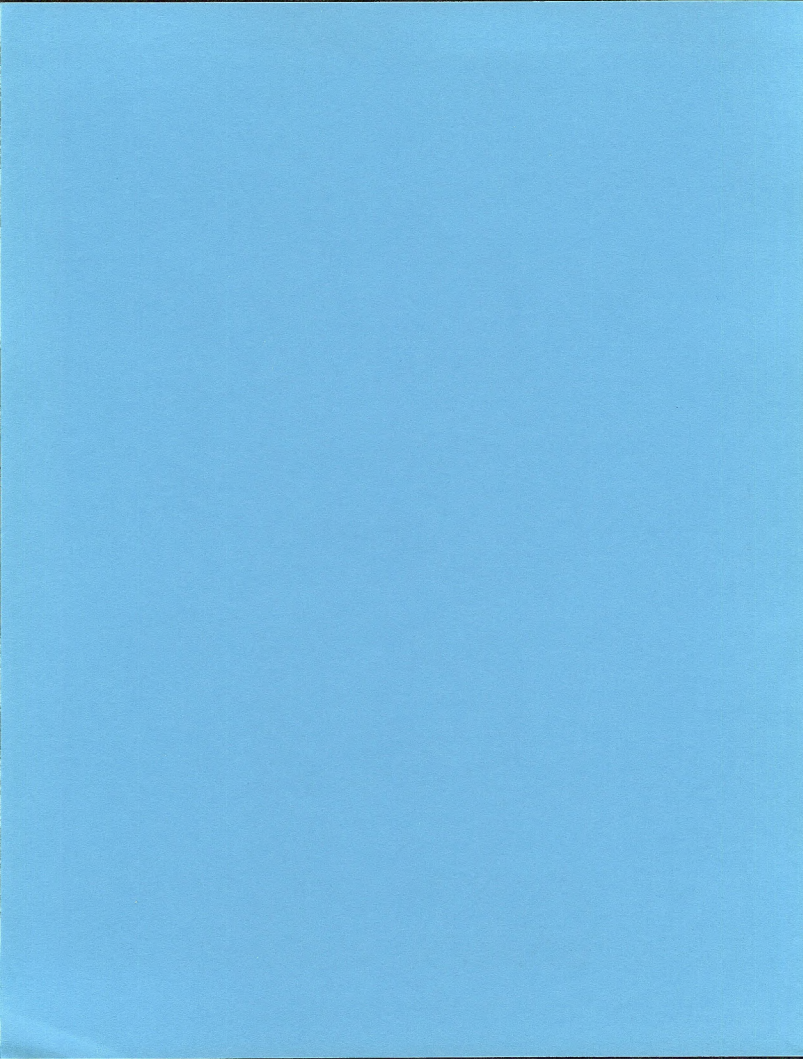
A3-1 – Steps in the Emergency Closure Process	A3-3
---	------

FIGURES

Introduction	
Figure i-1 – Steps in the Resource Management planning Process	i-4
Chapter 1	
Figure 1-1 – VRM Class Objectives.....	1-13
Chapter 3	
Figure 3-1 – Exchange Area by Alternative.....	3-9
Chapter 4	
Figure 4-1 – Overall Response to Plan.....	4-9

Summary





Summary

The Farmington Resource Management Plan identifies the proposed management direction for administration of public lands within the Bureau of Land Management's Farmington Resource Area for the next 10 to 20 years. Located in northwestern New Mexico, the Farmington Resource Area is directly responsible for managing 1,508,450 acres of federal surface estate and 3,000,000 acres of mineral estate within San Juan, McKinley, Rio Arriba, and Sandoval counties.

The Draft Farmington Resource Management Plan and Environmental Impact Statement was released for a 90-day comment period in February 1987. Comments and responses to the Draft RMP/EIS resulted in a few modifications and additions to the document. The entire document has not been reprinted and the reader is referred to the draft document for detailed information.

Preparation of this document was guided by Bureau planning regulations issued under the authority of the Federal Land Policy and Management Act of 1976. The plan primarily focuses on seven planning issues and the decisions needed to resolve them. The issues identified have been a source of controversy and concern regarding the use and management of public land resources. The seven issues are: (1) Land Ownership Adjustments; (2) Home Use Fuel Sources; (3) Special Management Areas; (4) Coal Leasing Suitability Assessment; (5) Transportation (public access and off-road vehicle designations); (6) Vegetative Uses; and (7) Right-of-Way Corridors and Windows.

To assist decision-makers and the general public in choosing appropriate solutions to the planning issues, four alternatives or management options were proposed - Current Management (A), Resource Con-

servation (B), Resource Production (C) and the Preferred Alternative (D). The range of alternatives was limited in scope to those that span a reasonable and implementable way of managing public lands. The principles of multiple use and sustained yield were observed in alternative formulation and environmental values were protected to the extent required by applicable laws, regulations, and policies.

This document introduces the Proposed RMP which closely resembles the Preferred Alternative D of the Draft. The preferred alternative has been modified based on public input and new information; however, modifications fall within the range of actions identified in other alternatives and thus do not involve new analysis of environmental consequences.

All substantive changes of the document are identified in the section titled Modifications and Corrections which constitutes errata on portions of the Draft that are assessed as adequate. Editorial changes and clarifications are identified through use of italics in the text.

This document consists of two major sections - the Proposed RMP and the Final EIS. The Introduction, Chapter 1 and Chapter 2 incorporate information necessary to describe the planning process beginning with the issues that prompted the endeavor and include the actions proposed to resolve the issues.

The Final EIS incorporates Chapters 3 and 4 which identify the affected environment, alternatives to the proposed action and the environmental consequences of implementing the alternatives. It also incorporates the public involvement strategy undertaken and displays verbatim the comment letters and oral testimony excerpts from public hearings and the Bureau's response to those comments.



Modifications and Corrections to Draft RMP/EIS



Modifications & Corrections To The Draft RMP

All substantive changes to the Draft RMP/EIS are identified in this section which, for ease of reference, follows the order of the Table of Contents in the Draft. Other changes, such as correction of typographical errors and clarifications, are identified throughout this document by italic print.

INTRODUCTION:

No substantive changes to the Draft.

Modifications and clarifications appear in italics beginning on page i-1.

Planning criteria were not repeated in this document.

CHAPTER 1 - PLAN ALTERNATIVES:

First section, Continuing Management Guidance, was updated as shown in italics.

Draft Page 1-9: Numeric listing of major land transfer actions changed. Item 1 and 2 have been combined into "state transfers."

Draft Page 1-17 (Table 1-1): MOU NM-264 added.

Second section, Plan Alternatives, brought forward into Chapter 3 of this document.

Draft Page 1-24: Table 1-2 deleted.

Draft Page 1-38: Most of the paragraph at the top of column 1 deleted as this paragraph is a part of Continuing Management Guidance in Proposed RMP Chapter 1.

CHAPTER 2 - AFFECTED ENVIRONMENT:

Updated and brought forward into Chapter 3 of this document with the following exceptions:

Draft document maps 2-2, 2-3, 2-4, 2-5, and 2-6 were deleted.

Draft tables 2-3, and 2-4 were deleted.

(Note: Deletions were accomplished to eliminate maps and tables with no changes to cut publication costs.)

CHAPTER 3 - ENVIRONMENTAL CONSEQUENCES:

Due to space considerations and since there were no substantive changes to impact analysis, this chapter is not repeated in this document. However, the Summary of Anticipated Impacts by Alternative table is repeated for your information and changes in text are noted below.

Draft Page 3-12, 2nd column, add after 3rd paragraph: *Proper lease stipulations could mitigate impacts if the present situation were to change and high interest raptor species did begin to nest on any of the coal tracts.*

Draft Page 3-19, 1st column, delete from 3rd paragraph, 1st sentence, the word "only."

Draft Page 3-24, 2nd column, 1st full paragraph, change to read: With reductions in authorized use on "T" category grazing allotments, the expected *12 percent* decrease in acres in poor ecological condition should improve vegetative cover and reduce soil erosion in the long term.

Draft Page 3-24, 2nd column, 4th sentence, change to read: Long-term impacts to *less than one percent* of the soils in the Resource Area would occur from coal mining activities, but the impacts would eventually be mitigated by reclamation efforts.

Draft Page 3-51, 1st column, add to 1st paragraph: *Land consolidation efforts could be very beneficial to management of state and Indian lands.*

CHAPTER 4 - CONSULTATION AND COORDINATION:

This chapter was completely updated to reflect continuing coordination and consultation. Sections added include comment analysis, verbatim comment letters and responses, and excerpts from transcripts and responses.

APPENDIX F, G, I, J, K, L, M, N:

No changes, not brought forward into this document.

APPENDIX A:

Valid MFP decisions were pulled forward into this document as Table 1-2 in Chapter 1.

APPENDIX B:

This appendix and the SMAs identified in the Preferred Alternative of the Draft are brought forward as Appendix 1 in this document. The general descriptions and management goals remain essentially the same, but the management prescriptions were re-addressed based on public comment. Jones Canyon was re-named Thomas Canyon due to duplication of the same SMA name in the Rio Puerco Resource Area.

Three SMAs were added to Appendix B of the Draft and carried forward in Appendix 1 of this document: Continental Divide, Farmer's Arroyo Site, and 1 Navajo Refugee Site (Canyon View Ruin).

APPENDIX C:

Brought forward as Appendix 4 in this document for your information with no changes.

APPENDIX D:

Brought forward as Appendix 2 in this document with additions and clarifications.

APPENDIX E:

Brought forward as Appendix 3 for your information. No changes.

APPENDIX H

Draft Pages H-1 through H-6, heading beginning Ecological Condition: word Area changed to *Acres*.

APPENDIX O:

Draft Page O-5, 2nd column: Delete last sentence in first paragraph under Criterion No. 1.

Draft Page O-6, Table O-3: Change for Pinehaven tract - Coal Development Potential *marginal*, and Surface Owner Consultation *See below (b)*. Footnote (b) for Table O-3 changed to read: Complex ownership, multiple residences *and/or* consultations . . .

Draft Page O-11, 1st column, 1st paragraph: Delete words "or for agricultural crop production . . ."

Draft Page O-11, 2nd column, top of page: Change word industrial to "institutional" building.

Draft Page O-17, 1st column, 1st paragraph under Criterion No. 11: Last sentence changed to read "Consideration of availability of habitat for prey species and of terrain shall be *included in the determination of buffer zones*. *Buffer zones shall be* determined in consultation with the USFWS.

Draft Page O-18, 1st column, 1st paragraph under Criterion No. 14: Add the word habitat to read "Federal lands which are high priority *habitat* . . ."

Draft Page O-20, 1st column, 1st paragraph under Criterion No. 19: Add the words *of this title*, following 43 CFR 3400.0-5(a).

APPENDIX P:

Draft Page P-2, Table P-1: Delete reference to Farmington 6 and Farmington 7.

Draft Page P-6, Figure P-1: Delete reference to Farmington 15.

The following table should be added to this appendix for clarification.

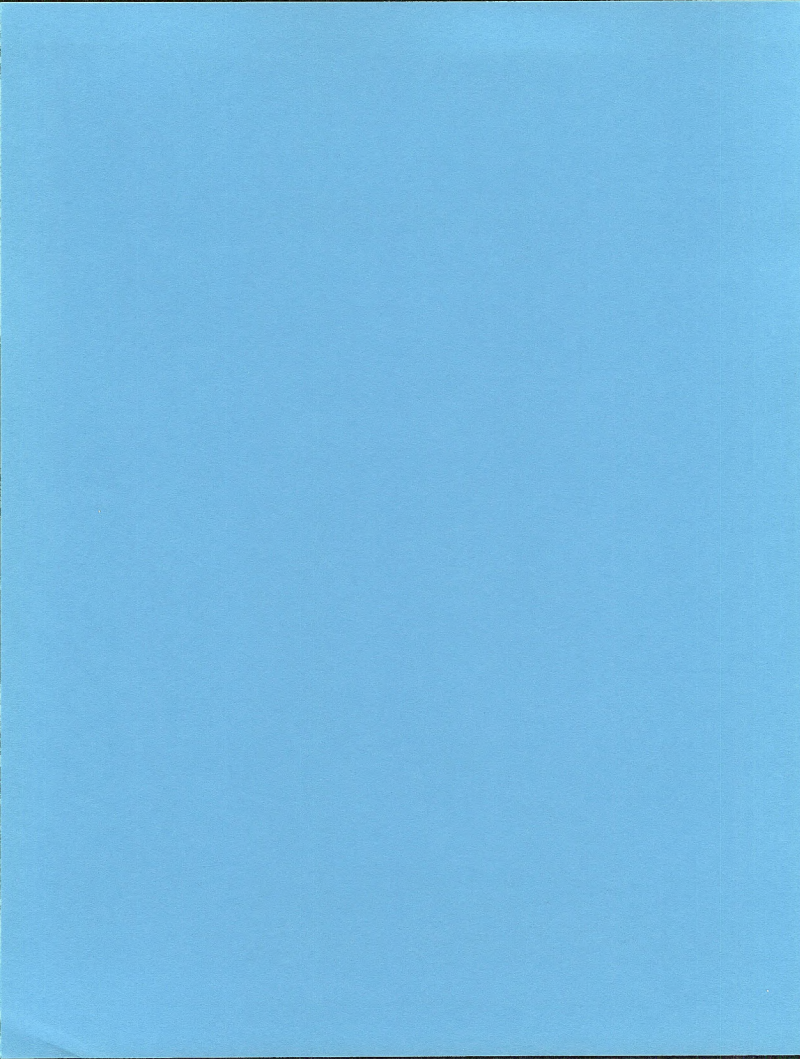
TABLE P-ADD: SUMMARY OF ROYALTIES PAID

	OIL ROYALTIES (X10 ⁶ DOLLARS)	GAS ROYALTIES (X10 ⁶ DOLLARS)	TOTL.ROYALTIES (X10 ⁶ DOLLARS)
1980	\$ 11.55	\$ 96.33	\$107.88
1981	\$ 17.91	\$115.10	\$133.01
1982	\$ 17.04	\$109.76	\$126.80
1983	\$ 17.63	\$102.63	\$117.26
1984	\$ 17.45	\$117.01	\$134.46
1985	\$ 22.76	\$107.96	\$130.72
Totals (x10 ⁶ dollars)	\$101.34	\$648.79	\$950.13

Table shows royalties paid on federal, state, Indian and private oil and gas in San Juan, Rio Arriba, Sandoval and McKinley counties, N.M., 1980-1985. Data compiled from N.M. Energy and Minerals Department Annual Resources Report for 1981-1986.

Introduction





Introduction

BACKGROUND

The Farmington Resource Management Plan (RMP) has been prepared to provide a comprehensive framework for managing the public lands and for allocating resources during the next 10 to 20 years using the principles of multiple use and sustained yield. These two principles are defined in the glossary. The RMP establishes areas for limited, restricted, or exclusive uses, levels of production, allowable resource uses, resource condition objectives, program constraints, and general management direction.



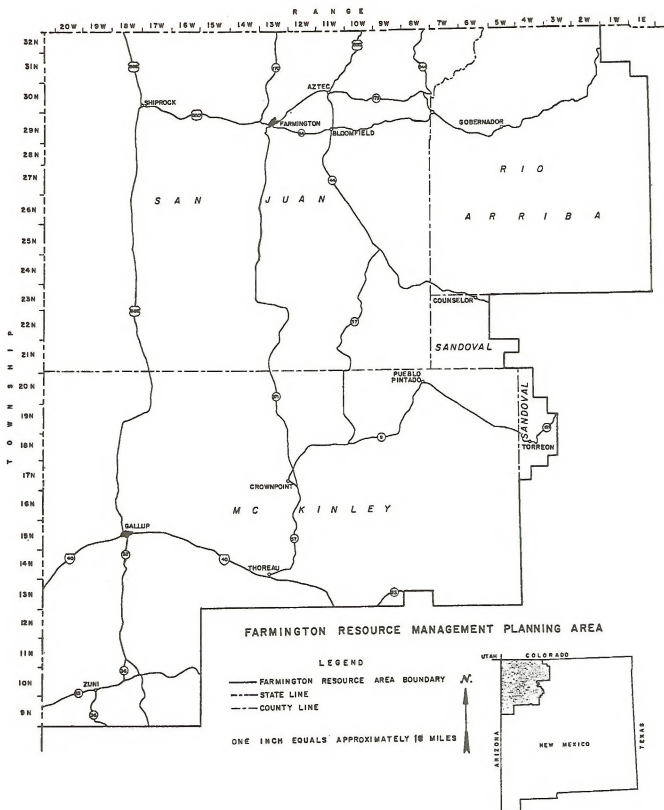
This document includes both a Proposed RMP (with four different management alternatives) and a Final Environmental Impact Statement (EIS), which fulfill the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA) requirements for comprehensive land use planning for public lands. Section 3(3A) of the Federal Coal Leasing Amendments Act of 1976 also requires comprehensive land-use planning prior to coal leasing. In addition, court-ordered and statutory requirements will be met upon final approval of two of the decisions proposed in this document. The first of these is the statutory requirement that public lands be designated as "open," "limited," or "closed" to off-road vehicle (ORV) use. This RMP/EIS also analyzes alternatives for livestock grazing on public lands as required by the court-ordered settlement of a 1973 lawsuit filed against the Bureau of Land Management (BLM) by the Natural Resources Defense Council. Plan amendments, if necessary, will keep the RMP current with resource management needs and policies.

Between 1979 and 1981, the Farmington Resource Area prepared land use plans, known as Management Framework Plans (MFPs), for all public surface and minerals within its area of jurisdiction. These MFPs will continue to be implemented to the extent they are not in conflict with the direction proposed in this RMP.

LOCATION

The planning area, located in northwestern New Mexico, encompasses approximately 5,000,000 acres of mixed land ownership and includes all of San Juan County, most of McKinley County, western Rio Arriba County, and northwestern Sandoval County. Included within this area are approximately 1,508,450 acres of public surface estate and approximately 3,000,000 acres of subsurface minerals. The management objectives and philosophies developed in this plan would be applied only to the public surface and/or mineral estate. Map i-1 illustrates the planning area and shows its location within New Mexico. The population of the area is centered around the Farmington-Aztec-Bloomfield-Shiprock area to the north, and the Gallup-Crownpoint area to the south.

The distribution of the public lands has an important influence on land management options. The public lands are fairly well consolidated in northeastern San Juan County, while scattered or "checkerboard" ownership patterns predominate over much of the remaining planning area. The planning area includes some public land in Sandoval County that is part of the Rio Puerco Resource Area (RPRA). An agreement between the FRA and the RPRA has assigned administrative responsibility for these lands to the FRA. For this reason, this area is included in the Farmington RMP/EIS planning area.



MAP I-1

THE PLANNING PROCESS

The BLM resource management planning process consists of nine basic steps. This process requires an interdisciplinary team of resource specialists. The steps described in the planning regulations and followed in preparing this RMP are summarized below and graphically displayed in Figure i-1. Publication of this document is part of Step 8, selection of the Resource Management Plan.

• Step 1. Identification of Issues

The first step in the planning process is intended to identify resource management problems or conflicts that can be resolved through the planning process. These problems or conflicts (issues) were identified by the BLM and other agency personnel as well as members of the public. Seven issues were identified and are considered in this document and are discussed in detail.

• Step 2. Development of Planning Criteria

During this step preliminary decisions are made regarding the kinds of information needed to clarify the issues, the kinds of alternatives to be developed, and the factors to be considered in evaluating alternatives and selecting a preferred Resource Management Plan. As each issue was identified, a list of planning criteria was developed to help guide the resolution of that issue.

• Step 3. Inventory Data & Information Collection

This step involves the collection of various kinds of environmental, social, economic, resource and institutional data needed for completion of the process. This step can include detailed field studies, literature studies or consultation with appropriate professionals. In most cases, this process is limited to inventories needed to address the issues.

• Step 4. Management Situation Analysis

This step calls for deliberate assessment of the current situation. It includes a description of current BLM management guidance, a discussion of existing problems and opportunities for solving them, and a consolidation of existing data needed to analyze and resolve the identified issues. The end result of this step is the development of an unpublished companion document known as the Management Situation

Analysis (MSA). Chapter 1 of that document is used to develop the Continuing Management Guidance section of the RMP. MSA Chapter 2 is used as a basis for compiling the Affected Environment chapter of the RMP. Copies of the MSA are available for review in the Farmington Resource Area office.

• Step 5. Formulation of Alternatives

During this step several complete, reasonable resource management alternatives are prepared, including one for no action and others that strive to resolve the issues while placing emphasis either on environmental protection or resource production. This important section of the RMP has been incorporated into Chapter 3.

• Step 6. Estimation of Effects of Alternatives

The physical, biological, economic, and social effects of implementing each alternative are estimated in order to allow for a comparative evaluation of impacts. This step, known as the Environmental Consequences section, is found in Chapter 3 in this RMP.

• Step 7. Selection of the Preferred Alternative

Based on the information generated during Step 6, the District Manager identifies a preferred alternative. The Draft RMP/EIS document is then prepared and distributed for public review. It should be noted that Alternative D was selected by management as the preferred alternative.

• Step 8. Selection of the RMP

Based on the results of public review and comment, the District Manager will select a proposed Resource Management Plan and publish it along with a final EIS. We are presently at this step in the planning process. A final decision is made after a 60-day Governor's Consistency Review and a 30-day public appeal period on the Final EIS are completed.

• Step 9. Monitoring and Evaluation

This step involves the collection and analysis of long-term resource condition and trend data to determine the effectiveness of the plan in resolving the identified issues, and to ensure that implementation of the plan is achieving the desired results. Monitoring continues from the time the RMP is adopted until changing conditions require a revision of the whole plan or any portion of it.

STEPS IN THE RESOURCE MANAGEMENT PLANNING PROCESS

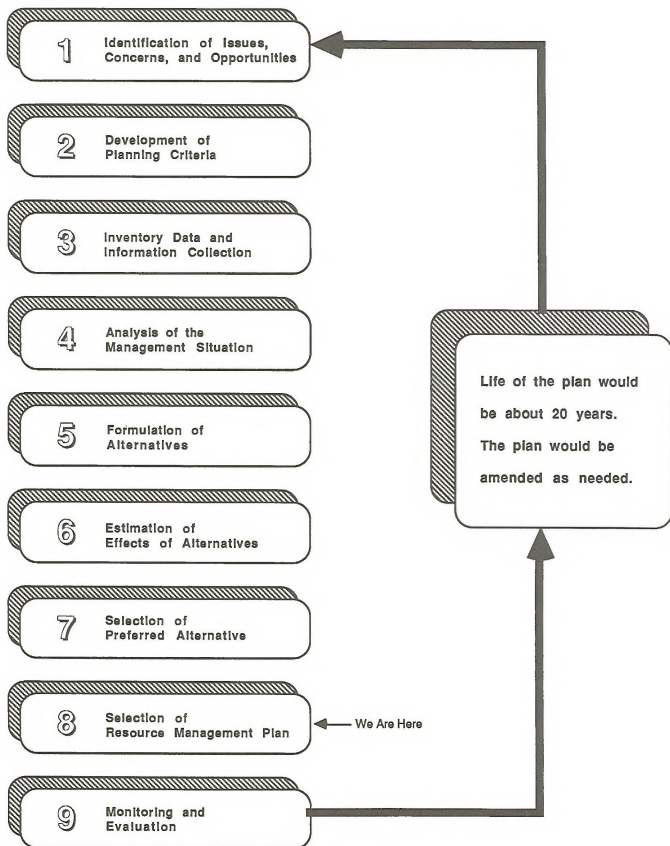


FIGURE I-1

PLANNING ISSUES

The BLM planning regulations (43 Code of Federal Regulations [CFR] 1600) equate land use planning with problem solving and issue resolution. An issue is defined as an opportunity, conflict, or problem regarding the use or management of public lands and resources. Not all problems are capable of resolution through land use planning - some may require changes in policy, budget, or law. Issue-driven planning, which is the approach used in RMPs, means that only those aspects of current management that are believed to be at issue are examined through the process of formulating and evaluating alternatives. The issue-oriented approach eliminates needless data gathering and analysis by focusing on existing conflicts and controversies.



Several problems brought up during the issue identification process are not included as separate issues in the RMP/EIS. Some of these are resolvable within continuing management guidance; others, such as the protection of significant cultural resources, would also be resolved with the identification of Special Management Areas. Those aspects of current management that are not issues are covered in Chapter 1.

The seven issues addressed in this RMP/EIS were identified based on the judgment of the RMP interdisciplinary team of resource specialists, interagency consultation, state government input, review by BLM managers, and through extensive discussions and public meetings with individuals, industry representatives, and special interest groups.

Planning criteria are the standards, rules, and measures used for data collection and alternative formulation, and have guided final plan selection. Planning criteria are taken from appropriate laws and

regulations, guidance found in BLM Manuals and directives, and concerns expressed in meetings and consultations, both with the public and with other agencies.

The following seven planning issues were identified for resolution in the RMP.

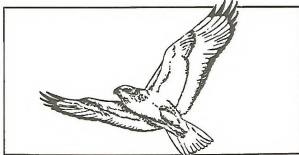
• Issue #1: Land Ownership Adjustments

Small, scattered, and isolated tracts are often expensive or difficult to manage, and normally contribute little to the public land resource. Some of these parcels, which are close to urban areas, are also in demand for community expansion. Exchange or disposal of these tracts often improves management efficiency by focusing efforts on larger tracts where the BLM has more opportunities to meet its goals and objectives. Significant amounts of public lands in the southern half of the Resource Area are in small, isolated tracts. The RMP considers where and what types of land ownership adjustments could achieve more efficient management of the public land resources.

The basic concept of land ownership adjustments is to consolidate administrative boundaries to create a more efficient and economical land ownership pattern. Areas for retention and exchange are identified under each of the four alternatives in Chapter 3. In the retention area, sale of public land would be limited to the acreages listed in Appendix 2. Where parcels are to be sold, the following criteria established in Section 203 of FLPMA must be met:

- (1) such tract because of its location or other characteristics is difficult and uneconomical to manage as part of the public lands, and is not suitable for management by another federal department or agency; or
- (2) such tract was acquired for a specific purpose and the tract is no longer required for that or any other federal purpose; or
- (3) disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in federal ownership.

If a parcel is to be disposed of through exchange, *Section 206 of FLPMA requires* that the action would serve the public interest. For example, the action would result in better federal land management, satisfy important state or local needs, or would help accomplish management objectives defined in this plan (e.g. inholding acquisition, trespass abatement, access needs, resource improvement, etc.). Without such determinations, it may be necessary to amend this plan before allowing disposal. Unlimited exchange opportunities may be entertained to consolidate federal and non-federal lands within the



retention areas. However, federal acreage within the retention zone should not decrease significantly, and in fact should increase. To reduce the impacts of split estate where practical, the BLM may pursue mineral exchanges as authorized by FLPMA Sec. 206. Nothing in this RMP is intended to prohibit mineral exchanges conducted under the BLM mineral exchange policy.

In the exchange zones, lands may be transferred out of federal ownership by any of a wide variety of exchange or disposal authorities as long as all applicable sale or exchange criteria are met and there are no major conflicts with other resource management programs. Lands in the Farmington Resource Area exchange zones can be utilized by other BLM resource areas within the state of New Mexico to provide a pool of lands for exchange purposes. There will be no title transfers of public lands within any Special Management Area (SMA) unless this is a management prescription of the SMA. In general, attempts would be made to acquire non-federal inholdings in SMAs if it is important to the management of the SMA. Any title transfer of public lands will require the BLM to prepare a mineral report, even if the transfer is only for the surface estate.

The difficulty with managing much of the public land in the southern portion of the Resource Area is demonstrated by the extensive unauthorized occupan-

cy and use of public lands in these areas. Past land exchange efforts, public land orders, executive orders, the Navajo Exchange, and the Navajo Land Selection based on the Navajo/Hopi Relocation Settlement Act illustrate this. Traditional BLM policies on land retention, exchange, and disposal do not work well in the southern portion of the Resource Area. To help alleviate this problem, the subject lands will have to be evaluated to determine which lands should be transferred out of BLM administration.

The criteria developed during the planning process provide for the following:

- Retention Zones:

Ownership will remain with the BLM over the long term. Exchanges for consolidating ownership will be considered and may include conveying retention lands to accomplish a desirable exchange. Recreation and Public Purposes (R&PP) applications will be considered. Sale proposals may only be considered for specifically identified parcels.

- Exchange Zones:

These lands will pass out of federal ownership over the long term. Priority for disposal would be given to exchanges; however, other forms of land transfers, such as those listed in the Chapter 1 "Continuing Management Guidance" section would also be considered.

- Acquisition Zones:

Inholdings (non-BLM) will be designated for acquisition if important to proper management of the area. Ownership of public land will be maintained by the BLM over the long term. No disposal proposals will usually be considered.

To resolve this issue, answers are needed to the following questions:

On which lands should ownership be adjusted (exchanged, disposed, and/or acquired) to facilitate more efficient management?

• Issue #2: Home Use Fuel Sources

Based on public comments, this issue has been expanded from fuelwood to include domestic use of coal.

Over the past 10 years there has been a significant increase in demand for fuelwood and coal for use in home heating and cooking. This is due to the

increased use of home fireplaces and stoves in urban areas as well as continued heavy subsistence use in remote areas of the Resource Area.

Areas which should be closed to fuelwood cutting must be identified and an education and enforcement program developed.

Two licenses for domestic use coal mining presently exist in the Resource Area. The potential for issuance of additional licenses exists. In the past, there have been problems obtaining proper legal compliance in the rehabilitation of domestic use coal license areas.

To resolve this issue, answers are needed to the following questions:

Which public lands should be designated for sale of fuel resources and what seasonal limitations should be placed on collection?

Where are public lands where fuelwood cutting can be used as a tool to reduce resource conflicts and/or enhance resource management?

Should federal coal outcrops on public lands be made available under license for home heating and cooking?



Issue #3: Special Management Areas

The Resource Area contains certain areas where special management could protect important natural, cultural, recreational, paleontological, scenic, mineral, botanical, wildlife, watershed, and wilderness values (see Appendix 1 for a description of each area). Special management could be achieved through identification of a variety of designations. Past planning decisions concerning special management designations will be carried forward unless additional information requires further analysis.

To resolve this issue, answers are needed to the following questions:

What areas and resource values should be identified for special management attention?

How should such areas and resource values be managed?

Issue #4: Coal Leasing Suitability Assessment

Portions of the Resource Area are potentially valuable for the development of coal. The demand to develop this resource fluctuates almost annually due to changing demands for electric power, trends in alternate fuel costs, and availability. Over 75,000 acres of BLM-administered subsurface are under Preference Right Lease Applications (PRLAs). In addition, 663,941 acres have been considered for competitive leasing. The four coal screens (coal development potential, unsuitability criteria, multiple use, and surface owner consultation), which serve to limit the areas under consideration, were applied to the areas being considered for competitive leasing during preparation of a coal leasing EIS in the early 1980s (San Juan River Regional Coal EIS, USDI, BLM 1984a). The screens have been re-applied during this planning effort with particular emphasis on recent coal data acquisition and new, specific multiple use screens.

To resolve this issue, answers are needed to the following questions:

After reapplication of the four land use planning screens for coal, which tracts already identified under round one of the coal program should be carried forward for further consideration for coal leasing?

Are there any new areas which should be considered acceptable for further consideration for coal leasing?

Issue #5: Transportation

This issue includes off-road vehicle designations and public access needs. It is BLM policy to designate all public lands in its jurisdiction as "open," "limited," or "closed" to motor vehicle use. The BLM will also address public access needs.

Motorized vehicles will be discussed in terms of design and capabilities of off-road vehicles (ORV) and off-highway vehicles (OHV). ORVs are vehicles designed for and capable of travel over natural terrain and water. OHVs are for the most part designed for travel on unpaved roads or trails and not particularly for off-road use.

Public lands currently or historically used for organized ORV events will be designated "open" or "limited" for intensive ORV use if there are no significant resource protection needs, user conflicts, or public safety concerns.

To resolve this issue, answers are needed to the following questions:

What public lands should be designated as "open," "limited," or "closed" to off-the-road vehicle use?

What transportation routes should be constructed, maintained, restricted from public use, or closed and rehabilitated?

What special use areas should be designated for off-the-road vehicle use to meet specific user group and general public demand?

What OHV/ORV designations would result in minimum conflict between people and resources and in what areas?

• Issue #6: Vegetative Uses

Approximately 468,000 acres of public lands in the Resource Area not considered in prior grazing EIS's have been inventoried for ecological condition. As a result of the analysis of the inventory data, these public acres have been placed in one of three selective management categories. The principal consideration for this issue is to determine changes in livestock grazing use, if any, needed to reduce conflicts between livestock grazing and other uses of the public lands.

This issue applies to all the public lands in the Resource Area not addressed by the San Juan Grazing Management Environmental Impact Statement (USDI, BLM 1980).

Management changes appear to be needed in some livestock grazing allotments in order to reduce conflicts between livestock grazing and other important resource values and uses.

The BLM is obligated to satisfy the National Environmental Policy Act (NEPA) requirements in the selection of rangeland management practices. The

Farmington Resource Area has satisfied this obligation for the northern portion of the Resource Area under the San Juan Grazing Management EIS. Compliance with NEPA has yet to be achieved for the southern portion of the Resource Area. A range of grazing management alternatives, from no grazing to maximizing livestock production and their respective environmental impacts, are considered in this RMP. In addition, the Memorandum of Understanding that the BLM has with the Navajo Tribe and the Bureau of Indian Affairs (BIA) will be evaluated to determine environmental acceptability of this administrative arrangement.

To resolve this issue, answers are needed to the following question:

What are the correct levels of vegetative use for livestock, wildlife, and watershed production outside of the area covered by the San Juan Grazing Management EIS?

• Issue #7: Right-of-Way Corridors and Windows

The San Juan Basin oil and gas field, as well as three coal-fired electrical generating stations, are located within the boundaries of the Resource Area. Consequently, there is a need to ensure that the development of linear rights-of-way minimizes adverse impacts on other public resources.

In general, right-of-way windows would be designated as the preferred locations for future transmission line and pipeline placement. Exclusion areas where right-of-way placement may be discouraged will also be identified.

To resolve this issue, answers are needed to the following questions:

Which public lands in the Resource Area should be designated as utility corridors or windows?

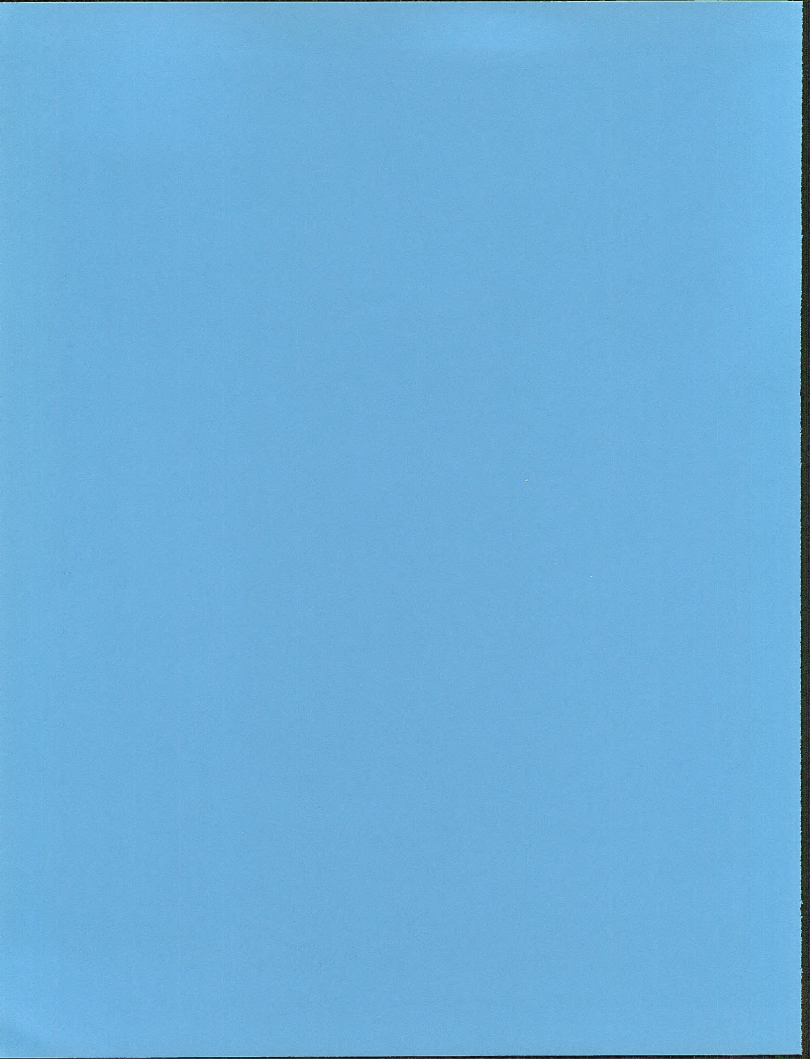
Where should rights-of-way be restricted or prohibited?

What land-use restrictions should be placed on the public lands within the identified corridors or windows?

Continuing Management Guidance

Chapter 1





CHAPTER 1

Continuing Management Guidance

INTRODUCTION

This chapter is a summary of basic management policy that will continue without change under the Proposed RMP.

Existing Management Framework Plan (MFP) decisions from the San Juan and Chaco MFPs are brought forward as continuing management guidance (see Table 1-2). Some MFP decisions have been superseded by new planning decisions adopted in this RMP. Those public land resources and programs not addressed specifically in the proposed plan would be managed as outlined in this chapter.

As the BLM moves forward in the land-use planning process, it is important to note the U.S. Forest Service (USFS) is also completing similar land-use plans. Many readers may be aware there is a proposal before Congress known as the BLM/FS Interchange which could result in realignment of land management jurisdictions between these two agencies. The intent of this legislation is to enhance public service, improve administrative efficiency, and reduce costs in areas which have intermingled land jurisdiction. It should be noted that if the Bureau of Land Management and U.S. Forest Service Land Interchange does occur, the present proposal would transfer 11 percent of the Carson National Forest, known as the Jicarilla Ranger District, to BLM ad-

ministration. In terms of land-use planning, the BLM would simply adopt the applicable portions of the Carson National Forest land-use plan rather than revise this RMP.

Continuing Management Guidance is brought forward from existing regulations and land-use plans.

The following paragraphs describe the resource management direction that will continue to guide multiple-use decisions. This direction is fundamental and its associated guidance is based on laws, regulations, manuals, policy, executive orders, memoranda, and applicable planning documents. The San Juan (USDI, BLM 1979c) and Chaco (USDI, BLM 1981b) MFPs provide specific guidance on land-use planning for the Resource Area. When approved, the Farmington RMP will constitute the final land-use plan that will supersede all previous land-use planning. As summarized below, the continuing management guidance is based on detailed information contained in an unpublished companion document called the Management Situation Analysis (MSA). This document is available for public review at the Farmington Resource Area (FRA) Headquarters.

MINERALS

It is the policy of the BLM to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs, consistent with national objectives of an adequate supply of minerals at reasonable market prices. At the same time, the BLM strives to ensure that mineral development is carried out in a manner which minimizes environmental damage and provides for the rehabilitation of affected lands. The Bisti and De-na-zin Wilderness Areas and the Fossil Forest Research Natural Area are withdrawn from all mineral entry, *mineral leasing*, or mineral sales *subject to valid existing rights until Congress revokes the withdrawal.*

BLM strives to ensure that mineral development is carried out in a way which minimizes environmental damage.

• OIL AND GAS

The FRA has responsibility for a considerable amount of oil and gas activity in the San Juan Basin. The Resource Area's responsibilities consist of permitting and inspection and enforcement programs for the entire Albuquerque District plus portions of southeast Utah and northeast Arizona. A gradual shift of responsibility from the Resource Area to the other resource areas and states is expected, but for the foreseeable future the FRA will continue to exercise these responsibilities. As a general rule, all public lands not managed under the BLM Wilderness Management Policy (USDI, BLM 1981a) and Interim Management Policy and Guidelines for Lands Under Wilderness Review (USDI, BLM 1979) are available for oil and gas exploration, leasing, and development. In certain areas, oil and gas leases are issued with only standard stipulations attached. In other areas, leases may have special stipulations attached at the time of issuance to protect sensitive resource values. In highly sensitive areas, where special stipulations are not sufficient to protect important resource values, "no surface occupancy" stipulations are attached to leases. Site-specific decisions regarding lease issuance and the attachment of appropriate stipulations will continue to be based on the leasing

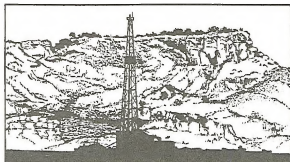
guidelines contained in the Northern New Mexico Oil and Gas Environmental Analysis Record (USDI, BLM 1974).

• COAL

The FRA contains existing surface mines, coal leases, Preference Right Lease Applications (PRLAs), and competitive coal lease tracts. The San Juan River Regional Coal EIS (USDI, BLM 1984a) provides a detailed analysis of coal resources and potential impacts of coal leasing. Due to the large amount of information presented in that document there has been no attempt to repeat the information in this RMP. The laws and regulations for development of coal are summarized in that EIS. *The Federal Coal Management Program EIS Supplement (USDI, BLM 1985g) also provides updated information and guidance on coal leasing.* All existing guidance will be followed in the preparation of each alternative.

• MATERIAL SALES

Federal lands are the major source of mineral materials (primarily sand and gravel) for industrial projects in the Four Corners area. The Resource Area is responsible for the sale, permitting, and inspection and enforcement programs for mineral material activity. Regulations directing this program are found in 43 CFR 3600.



• LOCATABLE MINERALS

The primary locatable mineral in the Resource Area is uranium. A few claims have been staked in the northern part of the Resource Area for gold, sand, and gravel (pre-1955 claims) but these claims have little, if any, impact on the program. The majority of the locatable mineral activity is in McKinley County.

The Resource Area's responsibility in this program consists of completing validity examinations for patent or Bureau actions, and review and inspection

tion of notices of *intent to conduct operations* and plans of *operation* filed under the 43 CFR 3809 regulations.

Although the Resource Area does not have reclamation responsibility, it does have a responsibility to the District to report when reclamation will be needed and when environmental problems are encountered with locatable minerals.

• INDIAN LANDS RESPONSIBILITIES

The BLM works in cooperation (via Memoranda of Understanding) with the Bureau of Indian Affairs (BIA) and the Indian tribes on Indian-allotted lands and reservation lands. The BLM has primary responsibility for inspection of mineral leases and enforcement of mineral lease terms and conditions on Indian lands. The Farmington Resource Area is responsible for inspection and enforcement on all minerals on Indian lands except uranium leases, which remain the responsibility of the Rio Puerco Resource Area (on Indian lands all minerals are leaseable subject to the owner's consent and BIA approval). Surface protection for the oil and gas program is accomplished with BIA and/or tribal concurrence.

• AREAS OF SPECIAL CONSIDERATION

There are presently parts of 27 oil and gas leases on the Bisti and De-na-zin Wilderness Areas in the FRA. Strict surface protection stipulations are expected to prevent adverse impacts on the wilderness if drilling or production operations occur.

All mining claims that were located on the wilderness areas have been relinquished by the claimants and no active contracts for saleable minerals exist in either area. Since these areas are now closed to mineral entry, there will be no impact by the locatable or saleable programs.



Parts of four coal PRLAs lie within the wilderness areas. If a right to coal is determined after processing these applications, the Bureau may move to exchange the mineral estate for similar interests outside the wilderness areas.

There are parts of seven oil and gas leases and parts of three PRLAs within the Ah-shi-sle-pah Wilderness Study Area. BLM budget appropriations since 1983 have prohibited expenditure of funds on processing of mineral *leases* in WSAs.

The Fossil Forest Research Natural Area (RNA) contains parts of four PRLAs and parts of four oil and gas leases within its boundaries. The RNA has been temporarily withdrawn from mineral entry. Mineral management in the future will depend on results of a long-range study (completion date 1992) to determine how best to manage the area's resource values.

RANGELAND

The livestock grazing program in the Farmington Resource Area is authorized by the Taylor Grazing Act of 1934, the Bankhead-Jones Farm Tenant Act of 1937, the Federal Land Policy and Management Act of 1976, and the Public Rangelands Improvement Act of 1978. In addition to issuance of grazing permits and leases, unauthorized use detection and abatement, allotment supervision, and other actions authorized by the previously mentioned legislation, the San Juan Grazing Management Environmental Impact Statement (USDI, BLM 1980) has been completed and approved in compliance with the final judgment of the Natural Resources Defense Council vs. Morton lawsuit, Civil No. 1983-73. That environmental statement provides further program guidance through proposed actions and management objectives for 926,909 acres of public lands within the northern portion of the Resource Area.

Current management of the livestock grazing program is also guided by the final grazing management policy and the final range improvement policy outlined in Washington Office Instruction Memoranda 82-292 and 83-27, respectively, and which have been incorporated into current manuals, regulations, and handbooks.

The grazing program is basically divided geographically into two separate programs. This

division falls along the boundary between the areas formerly designated as the Chaco Planning Unit and the San Juan Planning Unit. These two areas are now referred to as the Chaco Rangeland Management Area and the San Juan Grazing Management EIS (SJEIS) Area, (see Map 1-1). The reason for this division is to differentiate between valid decisions in the SJEIS Area that were the results of National Environmental Policy Act impact analysis and the lack of NEPA compliance on decisions made for the Chaco Rangeland Management Area.

• SAN JUAN GRAZING EIS AREA

Specific management in the SJEIS Area is guided by the decisions reached in the San Juan Grazing Management EIS. Basically, these decisions were allotment-specific, and concentrated on stocking levels, season of use, and range improvements.

Because no substantive new issues or conflicts within allotments analyzed by the EIS have occurred, the decisions are still considered valid and are not analyzed further in this RMP. Information about the implementation of EIS decisions can be found in the yearly Rangeland Program Summary, available in the Farmington Resource Area office.

The Chaco Rangeland Management Area is the southern part of the FRA not covered by a grazing EIS.

The EIS proposed to protect and enhance the vegetation resource on 926,909 acres of public land in San Juan and Rio Arriba Counties by initiating a program of more intensive grazing management. To implement this program, period of use modifications, construction of rangeland improvements and vegetation treatments, and a monitoring program are being used to accomplish the objectives established by the EIS.

• CHACO RANGELAND MANAGEMENT AREA

The Chaco Rangeland Management Area is the southern part of the Farmington Resource Area that has not been covered by a grazing EIS. The livestock grazing program in this area is guided by the decisions outlined in the Chaco Management Framework Plan (USDI, BLM 1981b). Basically,

these decisions provided for current levels of grazing management to continue until completion of the grazing EIS which is integrated into the RMP.

• SELECTIVE MANAGEMENT CATEGORIZATION

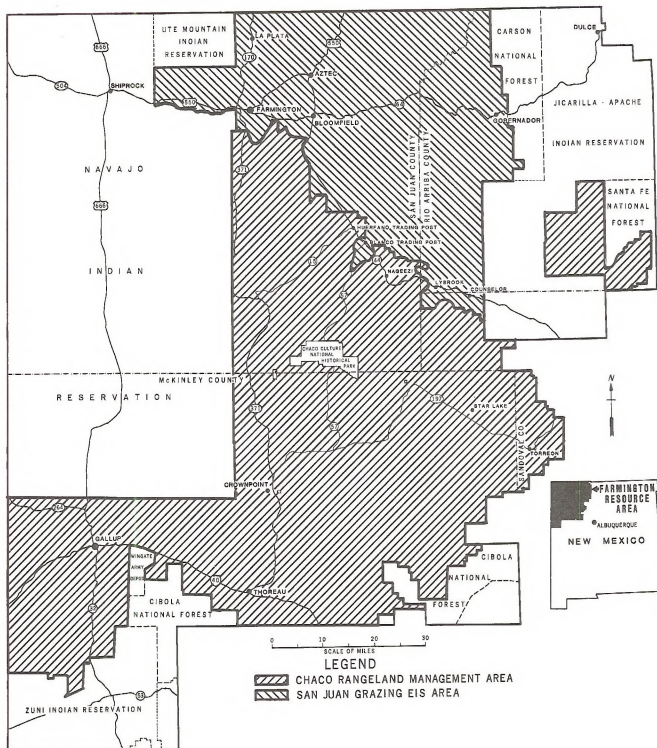
Each of the 138 grazing allotments covered by the San Juan Grazing EIS, as well as the 104 allotments in the Chaco Rangeland Management issue area, have been placed into one of three selective management categories based on present resource conditions and potential for improvement. Selective management categorization provides a system for establishing priorities for implementing changes in grazing management. These priorities are based on the need for improved allotment management, the need for resolution of identified resource conflicts, the potential for improved ecological condition, and the cost-effectiveness of implementing changes. Selective management categories can be changed as additional resource data become available. Changes in categories would result in management changes appropriate to the new category, consistent with the objectives of the approved RMP.

The three selective management categories are: Maintain (M), Improve (I), and Custodial (C). The "M" category allotments will be managed to maintain current satisfactory ecological condition. The "I" category allotments will be managed intensively to improve unsatisfactory ecological condition and resolve resource conflicts. The "C" category allotments will be managed to prevent resource degradation. The "C" allotments have a low potential for improved ecological condition, improvement is not economically feasible, and/or current management is satisfactory, considering the current resource conditions.

• MONITORING STUDIES

Vegetative monitoring studies are being conducted on public lands in the San Juan Grazing EIS Area. Condition and trend studies are being established and conducted in accordance with the Public Rangelands Improvement Act of 1978. Intensive vegetative monitoring studies, including the collection of precipitation, utilization, and actual use data, are being conducted on the "I" category allotments to evaluate changes in grazing management and to aid in the determination of livestock grazing capacities. Similar studies will be initiated in the Chaco Rangeland Management Area on completion of the RMP.

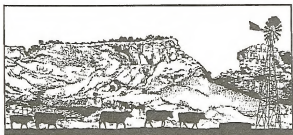
FARMINGTON RESOURCE AREA



MAP 1-1
CHACO RANGELAND MANAGEMENT AREA

• GRAZING MANAGEMENT PLANS

Specific management prescriptions to resolve the identified resource conflicts will be developed in Grazing Management Plans following completion of this RMP. These plans will be prepared in consultation, cooperation, and coordination with the affected allottees and/or other affected parties in accordance with Section 8 of the Public Rangelands Improvement Act of 1978, and with input from other FRA specialists to ensure that all resource needs are considered. The manner and extent to which livestock grazing use will be conducted and managed will be specified in these plans and will be consistent with the objectives of the RMP.



• LIVESTOCK GRAZING MANAGEMENT AND USE ADJUSTMENTS

Adjustments are made by changing one or more of the following: the kind or class of livestock grazing on the allotment, the season of use, the Animal Unit Months (AUMs) authorized for grazing, and/or the pattern of grazing. Generally, the estimated changes in AUMs available for livestock grazing use are applicable to the "I" allotments; however, use adjustment will continue for the "M" and "C" allotments in response to changes in resource demands and conditions.

The final determination of the livestock grazing use adjustments needed will be based on a program of systematic vegetative monitoring studies as well as the current vegetative data base. BLM Instruction Memoranda WO-82-292, WO-82-650 and NM-82-280, as well as the New Mexico Monitoring Handbook and the Farmington Rangeland Monitoring Plan, discuss the application of the vegetative monitoring studies in more detail.

Vegetative monitoring studies will also be used to evaluate the changes in resource condition resulting from grazing management practices and to evaluate the effectiveness of changes in grazing management to resolve the identified resource conflicts.

The changes in AUMs allocated for livestock grazing use can be implemented either through documented mutual agreement with the affected allottee or by a grazing decision. Adjustments through mutual agreement may be implemented after the public review period of the Resource Area Rangeland Program Summary. Adjustments implemented by a grazing decision will be based on consultation with the affected allottee and will be in accordance with the guidance in the federal regulations (43 CFR 4110.3-3). The regulations specify that permanent increases and decreases in allocations of livestock forage "shall be implemented over a five-year period...."

Elimination of all livestock grazing was analyzed in the San Juan Grazing Management EIS for 138 allotments and considered in this RMP/EIS as an alternative for the remaining allotments. While both no grazing alternatives were not considered feasible, practical, or implementable, elimination of livestock grazing may be advisable in selected areas where resource degradation or conflicts make livestock grazing undesirable. If this situation occurs an environmental assessment will be prepared before grazing is eliminated.

• RANGELAND IMPROVEMENTS

Additional rangeland improvements may be developed in accordance with BLM Instruction Memorandum WO-83-27. Future rangeland improvements will be designed and constructed to meet the management objectives proposed in the RMP.

*All allotments for which
rangeland improvement funds
are to be spent will be
subjected to economic analysis.*

The extent, location, and timing of such actions would depend on the improvements needed for each allotment, allottee contributions, and BLM funding capability, and would be developed with consideration for other resource uses.

All allotments for which rangeland improvement funds are to be spent will be subjected to economic analysis. This analysis will be used along with other considerations to develop a final priority ranking of

allotments for the commitment of the range improvement funds needed to implement Grazing Management Plans. In general, the highest priority for implementation will be assigned to those improvements for which the total anticipated benefits exceed the costs.

• GRAZING SYSTEMS

Grazing systems will be proposed for allotments in the Chaco Grazing Management Area. The type of system to be implemented will be based on consideration of the following factors: the degree and type of resource conflicts; resource characteristics, including vegetation potential and water availability; allottee needs; and implementation costs.



• UNLICENSED OR RELINQUISHED GRAZING LANDS

Approximately 9,200 acres of unleased public lands generally will remain available for consideration for authorized grazing in accordance with the BLM grazing regulations (43 CFR 4110 and 4130). Any of these public lands leased for grazing in the future will be managed in accordance with the objectives of the approved RMP. A grazing lease authorizes the use of public lands outside grazing districts under Section 15 of The Taylor Grazing Act for the purpose of grazing livestock only.

If grazing privileges are relinquished on public lands where fragile soils, low forage production, fencing problems, low livestock water availability, or conflicts with other resources make livestock grazing undesirable, the privileges will not be re-allocated.

• WILD HORSE MANAGEMENT

Guidance for the management of approximately 23 wild horses is provided by decisions reached in the San Juan Grazing Management EIS. Since the

size of the herd and other management determinations have remained static since the EIS was published, the decisions are still considered valid. Locations of management areas, specific management objectives, and other management direction information can be found in that EIS.

LANDS

Significant amounts of public lands in the Resource Area are in small, isolated tracts. Land ownership adjustments could achieve more efficient management of the public land resources.

The difficulty with managing much of the public lands in the southern portion of the Resource Area is demonstrated by the extensive unauthorized occupancy and use of public lands in these areas. Past land exchange efforts, public land orders, executive orders, and the Navajo Exchange have attempted, but failed, to totally resolve the problem. Traditional BLM policies on land retention, exchange, and disposal do not work well in the southern portion of the Resource Area. To help alleviate this problem, these lands will be evaluated to determine which lands should be retained or transferred out of BLM administration. The methods of ownership adjustments could include exchanges, sales, transfers, and leases.

• LAND OWNERSHIP ADJUSTMENTS

There are basically three categories in which the public lands administered by the BLM can be placed. First, there are lands which the Bureau has identified for retention. With few exceptions these lands would remain in public ownership. The second category is those lands which have been identified through land use planning as being available for land ownership adjustments (exchanges or some other method of disposal). Since there are often intermingled private or state lands among public lands, there is a third possible management category. This category consists of lands that have been identified for acquisition by the BLM to help consolidate public use areas and improve certain Bureau programs.

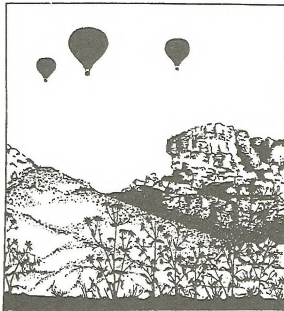
RETENTION ZONES

The Federal Land Policy and Management Act (Public Law 94-579 Oct. 21, 1976 - FLPMA) states that public lands should be retained in federal ownership unless adjustment is in the public interest. Therefore, public surface will remain under BLM administration if resources of national, state, or regional

significance are found upon them, and the possible adverse effects of the adjustment action cannot be mitigated at reasonable cost. Examples of such resources are: habitat for threatened or endangered species, riparian areas, wetlands, mining claims and important cultural resources.

EXCHANGE ZONES

Any lands designated for land ownership adjustment must be so identified through the Bureau's land use planning process. Additionally, all lands identified for sale in this RMP must meet the criteria established in Sections 203 and 209 of FLPMA. Use authorizations such as Recreation and Public Purposes (R&PP) leases will be considered for approval as they are received.



The federal government will generally retain all mineral rights, reservations for ditches and canals, and rights-of-way or easements if necessary when conducting exchanges or other types of disposal actions.

Existing authorized permits, leases, rights-of-way, and licenses will be identified as valid existing rights. All exchanges or disposals of public land will be subject to valid existing rights. Holders of valid permits or cooperative agreements covered by Section 4 of the Taylor Grazing Act will be reimbursed, by the new land owner, for financial investments they have made in rangeland improvements on public lands if the BLM exchanges or disposes of the land.

The following major land transfer actions are listed in their order of preference *as determined by BLM/NMSO policy*:

1. State transfers
2. Private exchanges
3. Recreation and Public Purpose patents
4. Withdrawals to other federal agencies
5. Public sales
6. Other methods of adjustment

ACQUISITION ZONES

Management is improved by consolidating public lands in contiguous land ownership patterns. Acquisitions to consolidate land ownership, public use areas, wildlife habitat, watersheds, land treatment areas, grazing administration, cultural values, and other resource management needs would have priority.

PUBLIC LAND EXCHANGES/SALES

There has been an active land exchange program in the Resource Area for a number of years. During the last three years a total of 60,230 acres has been transferred out of BLM administration. These transfers have enabled the Resource Area to resolve problems of conflicting use and allowed acquisition of approximately 77,700 acres of high-value lands needed for Bureau programs within the state. All exchange proposals are prepared in conformance with NEPA requirements, including extensive public review. Public lands which leave federal ownership as a result of exchange actions have been identified as suitable for land ownership adjustment in a previously approved planning document.

FLPMA states that public lands should be retained in federal ownership unless adjustment is in the public interest.

On Oct. 3, 1984, the Bureau of Land Management New Mexico State Director and the Commissioner of Public Lands of the State of New Mexico signed a Memorandum of Understanding to establish a comprehensive, long-term statewide land exchange program between the BLM and the State of New Mexico (USDI, BLM 1984b). The objectives of this program are to improve the land management potential of both state and federal lands; eliminate unneces-

sary federal and state conflicts generated by existing ownership patterns; facilitate the management of state and BLM lands by substantially realigning the scattered state and BLM sections and creating solid block or consolidated land ownership; and develop procedures that are most expeditious and cost effective.

Public Law 96-550, which expanded the boundary of the Chaco Culture National Historical Park, requires the Secretary of the Interior to designate a pool of federal property at least three times the private acreage included in the new park boundary.



This pool of land is to be used to complete land exchanges for private inholdings within the park. Similarly, Public Law 98-603 requires the BLM to exchange public lands or interest for 2,520 acres of state inholdings and addresses the acquisition of 1,652 acres of Indian allotment inholdings within the De-na-zin Wilderness. Consequently, the lands designated for land ownership adjustment can be used to accomplish these exchanges.

Sales of public lands identified as suitable for adjustment in an approved land use plan are administered on a case-by-case basis. All sale actions are examined through the NEPA process and are subject to public participation and review. Exchange or sale of any land must meet the adjustment criteria established for these types of actions in FLPMA.

• PUBLIC LAND WITHDRAWALS

In an effort to keep as much of the public land open to the widest variety of uses, the BLM reviews

existing withdrawals on public lands on a periodic basis. This review ensures that the reasons for the withdrawals are still valid and that only the acreage needed is retained in withdrawn status. Withdrawal reviews will be completed by 1991 for current withdrawals. Upon revoking or modifying a withdrawal, all or part of the withdrawn land could be restored to multiple use management. *Current withdrawal reviews are itemized in Appendix 2.*

BLM policy is to minimize the amount of public land withdrawn, particularly from mining and mineral leasing, and where applicable, to replace existing withdrawals with rights-of-way, leases, permits, or cooperative agreements. Withdrawal applications will be reviewed to determine if formal withdrawal is needed.

• RECREATION AND PUBLIC PURPOSES

A number of inquiries are received annually concerning the leasing of public lands under the authority of the Recreation and Public Purposes (R&PP) Act. Under the Act, the BLM has the authority to lease or patent public lands to governmental or non-profit entities for public parks, building sites, correction centers, or other public purposes. Applications are processed under the requirements of the National Environmental Policy Act (NEPA) and are subject to public review. Approximately three of these inquiries proceed beyond the application stage each year.

• RIGHTS-OF-WAY

The FRA grants rights-of-way, leases, and permits to qualified individuals, businesses, and governmental entities for the use of the public lands. As of 1986 an average of 300 energy-related and 50 non-energy right-of-way cases are processed each year. Protection of natural and cultural resources is considered in the granting process. Rights-of-way are also issued to promote the maximum utilization of existing rights-of-way, including joint use whenever possible. Over the past 15 years, numerous de facto right-of-way corridors have evolved throughout the Resource Area. Because of topographic and land ownership constraints, it is anticipated that portions of these de facto corridors will continue to be utilized. All right-of-way actions are coordinated, to the fullest extent possible, with federal, state and local government agencies, adjacent landowners, and interested individuals and groups. All right-of-way applications are analyzed on a case-by-case basis.

• NAVAJO OCCUPANCY RESOLUTION PROGRAM

The Navajo Occupancy Resolution Program has been initiated by the Resource Area to deal with lands problems in the southern portion of the Resource Area. Its first objective is to develop a land tenure program which will authorize or eliminate those homesites remaining after completion of the Navajo exchange (PLO-5721) while preventing future unauthorized occupancies. Approximately 500 homesites have been legalized since 1980. The second objective is to complete a plan which would provide guidance for the consolidation of both public and Navajo lands. This process would require a review of existing withdrawals and identification of any new withdrawals and legislation necessary to complete land transfers needed for consolidation.

Withdrawals to the BIA for the purpose of benefitting Indian groups will only be used for administrative sites and for segregating the land from operations under the mining laws in support of land exchange or sale proposals. They will not be used for transferring management responsibility.

Close coordination with the Navajo Tribe, the BIA, and the Department of Interior in the development of a suitable land tenure program is essential for this program to be successful. This coordination will be in the form of interagency agreement among the three groups as may be required.

• ACCESS

The Farmington Resource Area has not had an active easement acquisition program. This is largely due to the numerous roads located throughout the Resource Area that have historically been open to the public. For the most part this network of roads (estimated at over 10,000 miles) was generated by oil and gas development in the San Juan Basin. Normally only one or two easements are acquired each year. As required by Bureau policy, these easements generally provide legal access to BLM-initiated range improvement projects and recreation areas. Refer to Appendix 2 for a list of easement acquisition needs.

FORESTRY

The forestry program within the Farmington Resource Area consists of managing limited ponderosa pine stands and extensive piñon-juniper

woodlands. Congress has mandated through FLPMA that the forestry and woodland program be managed on the basis of multiple use and sustained yield. The Material Disposal Act of 1947, as amended, establishes the authority under which the BLM disposes of timber and other forest products.

• PONDEROSA PINE

The long-term goal of ponderosa pine management in the Resource Area is to increase reproduction and stand vigor, as well as to reduce encroachment of piñon-juniper into the ponderosa pine stands. Providing for the long-term maintenance of the ponderosa pine stands is also a goal of the program. Since existing ponderosa pine is managed for enhancement and protection of the stands, rather than the maximization of forest products, no specific allowable cut goals will be established for this species. All forestry practices implemented in the Resource Area will be in



conformance with standard silvicultural practices and the 1981 environmental assessment for the Timber Management Plan (USDI, BLM 1981c), covering the BLM Albuquerque and former Socorro Districts. All activity plans developed for forestry and woodland products are examined through the NEPA process and are subject to public review and participation.

• PIÑON-JUNIPER

The main guideline document for the woodland (piñon-juniper) program is the Public Domain Woodlands Management Policy Statement (USDI, BLM 1982c). The long-term goals of the woodland management program in the Farmington Resource Area are to establish and maintain healthy stands producing fuelwood on a sustained yield basis in established woodland management areas, to reduce

trespass cutting throughout the Resource Area and to manage stands with consideration for other forest and woodland product yields.

The piñon-juniper woodlands within the Resource Area are managed on a sustained yield basis. The first priority sources for fuelwood supply are, when practical, dead-and-down wood from chainings and chemically treated areas, rights-of-way and well pad clearings, and tree-thinning areas. Greenwood areas are rarely utilized. Specific silvicultural standards are established at the activity planning stage and are written on a site-specific basis. The silvicultural standards are consistent with acceptable methods for the species and site.

SOILS

Participation with the USDA Soil Conservation Service in the National Cooperative Soil Survey will continue. Continual evaluation and updating of older soil surveys is necessary to maintain a current database. Detailed soil surveys for individual projects will be conducted as needed. Soil information will be used in planning, support, and implementation of all resource activities. Emphasis is placed on prevention of deterioration or degradation of soil and water resources as well as on their conservation.

Soil data are particularly important to the Colorado River Salinity Program because a major portion of the San Juan Basin has moderately saline soils. Surface-disturbing activities on these soils add to the already severe salt problems in the Colorado River Basin.

Soil data are particularly important to the Colorado River Salinity Program.

Under the Conservation Reserve Program all lands in Soil Capability Classes II through VIII will not be available for desert land petition applications or agricultural leases. The program seeks to remove highly erodible lands from marginal agriculture operations.

The soils program will continue to provide support to other resource activities in the Resource Area. The program will also continue to emphasize its legis-

lative mandates of protection, maintenance, and enhancement of the soil resources.

HYDROLOGY

Policy and guidance for the management of water resources associated with lands administered by the Bureau is summarized in Manual Sections 1621, 7000 and 7200. A brief description of the different authorities for the program is also presented.

Current management direction is provided in completed Management Framework Plans (MFPs), the San Juan River Regional Coal EIS, the San Juan Grazing Management EIS, and specific policy statements. General program emphasis is on water rights, water quality, and watershed improvement - specifically water quantity (runoff) and channel stability (sediment yield). Additionally, the water resource program provides direct input to specific situations in proposed or ongoing resource development and management programs.

• WATER RIGHTS

Currently, a water use and rights inventory is being completed in the Resource Area in order to identify and quantify federal water uses and to determine the status of BLM's water right filings. Information compiled from the inventory will be used to finalize BLM water rights.

All water rights are acquired in accordance with state substantive and procedural law except where Congress or the Executive Branch have created a federal reservation with a reserved water right.

Federal reserved water rights are defined based on the Interior Solicitor's Opinion of June 25, 1979, as modified by Solicitor Coldiron's September 11, 1981, Opinion. BLM's federal reserved water right claims are primarily associated with the withdrawal established by the Executive Order of April 17, 1926, dealing with public water reserves, and the withdrawal for converted oil and gas wells under the Oil and Gas Well Conversion Act of June 16, 1934.

• WATER QUALITY

Water quality regulation in the United States receives its basic authority from two laws. The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, is the

basic authority for instream water quality standards and maximum permissible pollutant discharges. The Safe Drinking Water Act of 1974 is the basic authority for domestic water quality standards.

The Bureau's water resource program includes participation with the state and EPA in water quality management. Specifically, the BLM works to ensure that management and development practices comply with state water quality standards.

The Colorado River Salinity Control Act passed in 1974 directs the Secretary of the Interior to undertake research and development of salinity control projects and to develop methods to improve water quality. An amendment to the Act passed in 1984 specifically requires the Director of the BLM to develop a comprehensive program for minimizing salt contributions to the Colorado River from Bureau-administered lands. There are definite opportunities to reduce contributed salinity levels in the Resource Area, and these will be addressed during the preparation of resource activity plans including specific watershed activity plans.



DAM SAFETY PROGRAM

The first phase of this program is an inventory of dams, assessing the condition and maintenance needs of each structure. The second phase includes the development of a maintenance and rehabilitation plan for all structures, and preparation of Emergency Action Plans for High Hazard Dams (those dams for which dam failure represents a threat to life or property). Most of these structures represent large investments and those costs will be included in any land disposal and exchange appraisals.

WATERSHED ACTIVITY PLANS

In order to organize the workload in watershed rehabilitation and maintenance, a review of existing plans, inventories, and decision documents will be undertaken. This will provide a ranking of watershed

priorities based on conditions and impacts, and be responsive to available funding.

Control of erosion, sediment, and salt production remains a high-priority management goal. Areas with critical to severe (1.0 to greater than 3.0 acre ft/mi²/yr) sediment yields, along with areas that produce runoff having greater than 1,000 milligrams per liter (mg/l) dissolved salts, will be of major focus.

Within the FRA Resource Management Planning area, modification of existing Allotment Management Plans (AMPs) that adequately address watershed problems is preferred to development of separate activity plans. Those allotments without AMPs, but containing areas identified in previous planning documents or inventories as having either Critical or Severe watershed conditions, will have watershed activity plans developed. The San Juan MFP (USDI, BLM 1979c) directed implementation of watershed plans for the Gobernador, Largo, Pine, and Cereza Creek watersheds.

Efforts to minimize new road construction and close and rehabilitate unneeded roads to reduce water and wind erosion will continue. This direction was provided in the San Juan and Chaco MFP documents, and the San Juan Grazing Management EIS.

The hydrology program will continue to emphasize its legislative mandates of protection, maintenance, and enhancement of the resources as well as provide support to other resource activities in the Resource Area.

AIR QUALITY

Reduction of air quality impacts from activities on public lands is accomplished by mitigation measures developed on a case-by-case basis through the NEPA or other statutory or regulatory processes. Each impact is evaluated to see if it is allowable and acceptable. Activities such as road construction and mining have dust abatement programs as part of their permits or contracts.

The BLM is required to comply with the New Mexico State Implementation Plan on air quality as well as meet responsibilities under the Clean Air Act, as amended, and FLPMA. The BLM 7300 Manual will provide administrative guidance on air resources upon approval.

SCENIC QUALITY

• VISUAL RESOURCE MANAGEMENT (VRM)

Visual resources will continue to be inventoried and evaluated as part of activity and project planning. A contrast rating process is used as a project assessment tool during environmental review of affected areas. Stipulations are established as appropriate to ensure compatibility of the project with management objectives for visual resources.

Congressionally designated areas are subject to Class I VRM guidelines. Wilderness Study Areas are subject to an interim Class II category. Special Management Areas recommended for and designated in the Farmington Resource Area RMP will contain the VRM class management objective in their prescriptions if applicable.

• MANAGEMENT OBJECTIVES

The BLM administers visual resources according to four VRM Class objectives. The chart below displays the public land acreages by class.

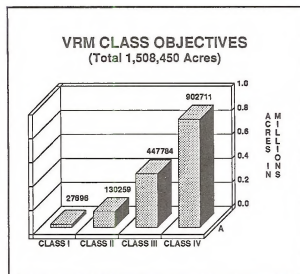


FIGURE I-1

• PROGRAM DIRECTION

The VRM System will continue to be the basic tool for inventory, planning, and management of visual resources on public lands. Future efforts will concentrate on updating the visual resource inventory database and re-establishing VRM class objectives. The BLM recognizes the constantly changing natural

resource base and its effects on scenic quality. Each multiple-use program has the responsibility to complete visual contrast ratings for all projects proposed for highly sensitive areas and for potentially high impact projects, regardless of location.

FIRE

The District fire program is directed by legislation and Bureau manual supplements. The main objective of the fire management program is to protect and enhance the resources of the public lands in order to preserve their capability to contribute toward meeting the resource needs of the nation. Because of the nature of the program and the implementation of the National Interagency Incident Management System, the overall fire management program exceeds Resource Area, District, and state boundaries in support of the national program.

The Bureau is directed by departmental policy (910 DM 1.1) concerning the suppression of wildfire. The suppression of wildfire, regardless of ignition source, is a high-priority Bureau activity. The highest priority is given to the prevention of disaster fires by aggressive prevention and suppression actions. In general, aggressive action is taken to contain all fires on or threatening the public lands during the first burning period, except in areas where an approved Limited/Conditional Suppression Plan is in effect such as in Wilderness Areas.

From departmental policy and the 9211 manual, the District develops its Fire Management Plan, Normal Fire Year Plan (NFYP), and Fire Activity Plan (District Fire Plan). The District Fire Plan is the activity plan that establishes how the District will operate when responding to a fire call.

All fires will be fully suppressed unless approved limited/conditional fire management plans are written and approved. *Such a plan has been prepared for the old San Juan planning unit.* Refer to Appendix 1, Special Management Areas (SMAs) for recommendations if limited/conditional plans are to be developed. Bureau policy (BLM Manual Section 9210.06E) provides for limited/conditional fire suppression actions in those areas with an approved fire management plan. The need for limited suppression is normally identified by fire specialists, resource specialists, and management. Economic benefit (resource value versus cost of suppression),

along with crew safety, is normally the principal objective. The decision to allow a fire to be placed under limited suppression will depend if the fire falls within the established constraints.

The Fire Management Officer (FMO) and/or the Area Manager may override the plans and require the fire to be fully suppressed if deemed necessary. The established constraints for immediate and appropriate suppression are if the fire endangers life or property or if the fire threatens to cross property boundary lines (private, state, or other federal). Oil and gas pads will have a 100 yard initial attack buffer zone. The NFYP must be amended to include the new SMAs instead of the previous six identified in the plan. In the case of fire emergencies, fire control vehicles shall be exempt from restrictions in designated "ORV closed areas" if deemed necessary by the FMO and/or the Area Manager. Off-the-road vehicular travel shall be restricted to the route of least damage and impact to the environment.

The Farmington Resource Area may do prescribed burning in support of resource management objectives. Burn plans and environmental assessments will be developed and approved at the activity plan level. Prescribed burning has been used sparingly in the past. Opportunities for prescribed burning exist in support of wildlife and range management.

Through the District, the Farmington Resource Area is involved with the "Joint Powers Agreement Between the State of New Mexico and Federal Agencies of the Department of Agriculture and Interior." The purpose of this agreement is to provide mutual wildfire assistance between signed co-operators. This agreement is established at the State Director level. The Joint Powers Agreement is further defined by the establishment of Joint Powers Operating Plans. The Farmington Resource Area is covered by the Santa Fe and Carson Operating Units. These plans establish initial attack zones of responsibility, regardless of land ownership. Zones were established based on "closest force" concept, capabilities, and fire frequencies. The operating plans are approved at the District Manager level.

WILDLIFE

Legislation such as the Federal Land Policy and Management Act of 1976 (FLPMA), the Endangered

Species Act of 1973, and the Public Rangelands Improvement Act of 1978, as amended, have directed the BLM to improve management of wildlife habitat to meet wildlife needs in the face of increasing demands for basic energy supplies, building materials, and food products. It is the responsibility of the Farmington Resource Area to identify opportunities to maintain, improve, and expand wildlife habitat on the public lands for both consumptive and non-consumptive use and identify portions of the wildlife resource deserving special attention. Furthermore, it is Department of Interior Policy (as specified in 43 CFR 24.4) that Interior agency fish and wildlife management strategies assist state agencies in accomplishing fish and wildlife resource plans.

All actions in the FRA are reviewed and given site-specific analysis during the environmental assessment process to determine whether the action will affect wetland or riparian areas. Also considered are impacts to resident species' habitat or habitat improvement projects and compatibility with the New Mexico Department of Game and Fish Comprehensive Wildlife Plan (NMDGF 1980). All range and watershed improvements will continue to be designed to achieve both range and wildlife objectives. This includes location and design of waters and vegetation manipulation projects. Fences are designed to cause the least resistance to wildlife movement.

• ANIMAL DAMAGE CONTROL

Animal damage control activities on public lands in the Resource Area are guided by Department of the Interior policy and the annual Animal Damage Control Plan for the Albuquerque District, prepared jointly by the U.S. Department of Agriculture (USDA) and the BLM. The USDA has overall responsibility for the program and supervises all control activities. The BLM has approval responsibility for the specific control actions on public lands.

• HABITAT MANAGEMENT

Activity plans for habitat management consist of approved Habitat Management Plans (HMPs). The Huerfano/La Plata HMP is scheduled to be finalized during FY 87. Implementation of existing HMPs (Pump, Rosa/Middle Mesa, Largo, and River) will continue as funding allows. The Largo HMP may undergo revision to conform with the New Mexico Department of Game and Fish plans in regard to Barbary sheep management.

Detailed estimates of big game forage allocations are presented in the San Juan Grazing Management Environmental Impact Statement (USDI, BLM 1980). Monitoring of the big game habitat through browse utilization transects will continue to be conducted as part of the rangeland program monitoring plan. The information obtained from the transects will be incorporated into final grazing decisions.

• INTERAGENCY AGREEMENTS

The wildlife program in the FRA functions in part through a variety of cooperative agreements with other agencies. A master Memorandum of Understanding (MOU No. NMSO-41) with the NMDGF delineates the duties and responsibilities of each agency. Other pertinent cooperative agreements are summarized in Table 1-1.

The Resource Area is also in the process of developing a cooperative management agreement with NMDGF for management of public lands next to the Jackson Lake Wildlife Management Area.

• THREATENED OR ENDANGERED SPECIES MANAGEMENT

The Endangered Species Act requires that the BLM consult with the U.S. Fish and Wildlife Service

on all actions which may affect a threatened or endangered species.

BLM policy for the endangered species program is to give first priority to the protection of habitat for known populations of listed species. The second priority is to implement recovery plans for listed species.

Present management for threatened or endangered species consists of evaluating all proposed actions for their potential impact on known populations of, or potential habitat for, listed or candidate species. These evaluations are also conducted on split estate lands if the surface managing agency does not have adequate data.

Protection and management of bald eagle roost areas and threatened or endangered plant areas will continue. In order to progress beyond a strictly reactive program for threatened or endangered plants, an Area-wide sensitive plant HMP is needed. Inventory for candidate species will continue and monitoring programs will be implemented on known populations of listed and candidate species. Where monitoring identifies threats to these populations, appropriate actions will be taken to protect the species and its habitat. Species recovery plans will be implemented as funding and staffing allow.

TABLE 1-1: COOPERATIVE AGREEMENTS RELATING TO WILDLIFE

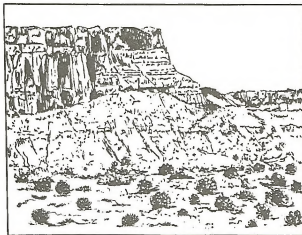
AGREEMENT OR MOU NUMBER	COOPERATING AGENCIES	SUBJECT
NMSO-39 (Expired 10/01/85)	NMDGF	Cooperative Management of Navajo Dam Land and Wildlife Management Plan
NMSO-46	NMDGF	Coordination of Vegetal Control Projects
NMSO-87*	USFWS, NM Dept. of Agriculture, NMDGF	Interagency Animal Damage Control Guidelines for New Mexico
NMSO-184	NM Dept. of Natural Resources	Natural Resources Data Base Coordination
NMSO-22	NMDGF	Master MOU delineates agency responsibilities for wildlife and habitat management
NM-264	<i>The Nature Conservancy</i>	<i>Master MOU to provide for cooperation, information exchange, and development of further MOUs and CMAs</i>

* Animal control responsibilities have been transferred from USFWS to USDA

WILDERNESS

The Bisti and De-na-zin Wilderness Areas will be administered under 43 CFR 8560 and the Wilderness Management Policy (USDI, BLM 1981a). Wilderness Management Plans will guide the specific management of the areas. A Wilderness Management Plan has been completed for the Bisti Wilderness (USDI, BLM 1986) and one is scheduled to be completed for the De-na-zin Wilderness.

The Ah-shi-sle-pah Wilderness Study Area (WSA) will be managed under Interim Management Policy and Guidelines for Land Under Wilderness Review (USDI, BLM 1979) *as amended*, until the area is added to the National Wilderness Preservation System or removed from further wilderness consideration. If designated as wilderness, the area will be managed under the Wilderness Management Policy (USDI, BLM 1981a). If removed from further wilderness consideration, the area will be managed under the principles prescribed by this RMP. The WSA has been recommended by the BLM as unsuitable for wilderness designation (*Preliminary* Bisti, De-na-zin, Ah-shi-sle-pah Proposed Wilderness EIS, USDI, BLM 1983).



CULTURAL RESOURCES

The BLM's cultural resource program has two roles: primary and support. The elements in the primary role include inventory, nominations to the state and National Registers and the National Historic Landmark program, Cultural Resource Management Plans, protection of cultural properties, and issuance of cultural resource use permits. The support role focuses on the BLM's responsibilities for compliance with state and federal law, particularly with Section

106 of the National Historic Preservation Act of 1966 (NHPA). These elements are based on legislated responsibilities outlined in the Antiquities Act of 1906, the NHPA as amended, the National Environmental Policy Act of 1969, Executive Order 11593, the Archeological and Historic Preservation Act of 1974, the Federal Land Policy and Management Act of 1976, the American Indian Religious Freedom Act of 1978 (AIRFA), and the Archeological Resources Protection Act of 1979 (ARPA). Policy and management guidance are provided in BLM's 8100 manual for cultural resources.

Cultural Resource Management Plans have been completed for four Chacoan outliers.

• INVENTORY

There are three classes of inventory:

Class I – examination and evaluation of existing inventory and site data. Required prior to field inventory for all projects.

Class II – field inventory of sample units, usually covering 10 percent of the project area.

Class III – intensive field inventory covering 100 percent of the project area. Required prior to any authorized surface-disturbing activity.

• NOMINATIONS

The BLM prepares and submits nominations of significant cultural resource properties located on the public lands to the National Register of Historic Places (NRHP). The BLM also coordinates with other agencies and organizations in nominating cultural resources eligible for inclusion in federal and state cultural resource registry systems.

• CULTURAL RESOURCE MANAGEMENT PLANS

Cultural Resource Management Plans have been completed for four Chacoan outliers (Casamero, Kin Nizhoni, Halfway House, and Twin Angels) and are planned for additional Chaco outliers under BLM administration. Other CRMPs for specific cultural resource properties and areas may also be developed in the future.

• PROTECTION

Administrative measures for protection of cultural resource sites include determination of eligibility for and listing on the National Register, designation of Areas of Critical Environmental Concern and National Historic Landmarks, mineral withdrawals, road closures, and public education programs. Physical protection measures include stabilization, monitoring of site condition, patrol and surveillance programs, signing, and fencing.



Farmington's protection program has focused on implementation of PL 96-550, the Chaco Protection legislation. This law set aside 33 Chaco outliers for special recognition and protection through completion and implementation of CRMPs and other administrative protection measures. In addition PL 96-550 requires development of a joint management plan to provide guidelines for identification, preservation, protection, and research at the sites. The FRA has seven outliers included in this legislation with two more proposed for inclusion.

• UTILIZATION

Issuance of cultural resource permits is a top priority for the cultural resources program and is mandated by ARPA. Permits are issued to qualified applicants for inventory, collection, and excavation on public land. Most permits are for non-collection and non-surface-disturbing inventory for small projects conducted prior to oil and gas development. Project-specific permits are issued for all projects requiring collection, testing, or excavation. The BLM is able to track and monitor activities related to cultural resource inventory, recordation, and mitigation through this permitting system.

• COMPLIANCE

Compliance with Section 106 of the NHPA dominates the workload of the cultural resources staff with an average of 1,300 undertakings reviewed every year. Section 106 requires the BLM to take into ac-

count the effects of its actions or authorizations on cultural resources. The BLM's policy is to avoid impacts to sites, but if impacts cannot be avoided, mitigation may be required prior to approval of the undertaking. Determination of effect on cultural properties is completed in consultation with the State Historic Preservation Office (SHPO) and follows procedures outlined in NMSO-168. NMSO-168 is a procedural agreement issued pursuant to 36 CFR 800, the Federal Regulation which implemented Section 106 of the NHPA.

NMSO-168 has resulted in the streamlining of the consultation process, allowing BLM to approve actions having no effect or no adverse effect on cultural properties prior to formal consultation. The agreement also speeds mitigation of effect in cases where the SHPO and BLM agree on a course of action, therefore eliminating time-consuming consultations involving the Advisory Council on Historic Preservation.

• PROGRAM DIRECTION

Section 110 of the National Historic Preservation Act states that it is the responsibility of each federal agency to establish a program to locate, inventory and nominate all properties under the agency's ownership or control that appear to qualify for inclusion in the National Register. The Area Cultural Resources Program will meet its responsibilities to Section 110 by establishing a goal for completion of a 10 percent inventory of the Resource Area over the approximate 20-year life of the plan. This Class II inventory will be conducted in the retention zone, SMAs and ACECs; however, the 10 percent inventory will not be project driven. Inventory outside the retention zone which is required prior to land exchanges or transfers will not be included in the 10 percent inventory acreage goal.

Although the 10 percent sample will be stratified across the retention zone, an initial focus will be in regions of potentially conflicting uses. This sample will provide comprehensive data which may be used to determine significance of sites and enable the BLM to make well-balanced decisions for protection of cultural resources. An overall goal of the sample inventory will be to gather sufficient data to build a model of site density and distribution.

In addition, National Register nominations will be prepared on a regular basis. A goal of one nomination per year has been set. These actions will

allow the cultural resources staff to make better informed decisions about the direct and indirect impacts on cultural resources. It will also significantly strengthen the current management approach for protection of cultural resource sites.

PALEONTOLOGY

Paleontological resources have a wide range of value to different facets of the public including scientists, educators, hobbyists, and commercial collectors. They are managed on public lands by the BLM because of their scientific and educational values. Without protection they may be damaged or destroyed by intentional or unintentional acts and the information they reveal about the past may be lost.

In order to protect the paleontological resources, and to realize their value, paleontological resource program objectives include the following:

(1) To facilitate paleontologic research and collection on public lands.

(2) To provide for other paleontologic resource uses such as education and recreation.

(3) To protect scientifically and educationally valuable paleontological resources when in conflict with other natural resources and land uses.

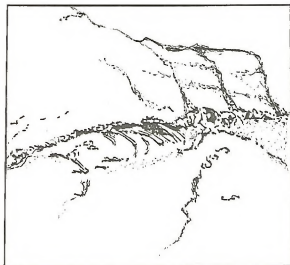
***Paleontological resources have
a wide range of value to
different facets of the public.***

(4) To accord the protection provided under law to scientifically valuable fossils.

(5) To allow commercial and hobby collection of *invertebrate and plant fossils* under 43 CFR 8365.15.

To achieve these objectives, the paleontological resources management program will implement the following:

(1) Identify and evaluate paleontological resources so they may be adequately addressed by the BLM planning system and environmental analysis documents.



(2) Maintain and conduct an effective and continuing paleontological resources management program as part of its planning system.

(3) Increase the awareness of federal land managers and the public regarding the importance of paleontological resources and management requirements, and encourage public participation in their management.

(4) Develop volunteer or cooperative management agreements and associations with individuals, professional paleontologists, local organizations, universities, museums, and governmental entities in order to facilitate the management and protection of paleontological resources.

(5) Avoid or mitigate impacts to scientifically valuable paleontological resources at a level commensurate with their importance.

(6) Promote awareness among users of the public lands of the importance of paleontological resources in order to augment management and protection objectives. Efforts will continue to be made to avoid focusing attention on the exact location of scientifically significant paleontological resources if such attention would conflict with management objectives for those resources.

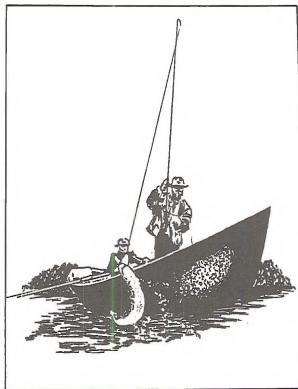
The Fossil Forest Research Natural Area is being managed under the Interim Management Plan developed July 1986. The plan was developed in accordance with final rules and regulations published in the Federal Register November 18, 1985.

Although there is no apparent great demand for the paleontological resource, a steady interest in the form of permit applications is expected to continue.

Overall, the BLM recognizes the value of paleontological resources and continues to strive to meet the objectives described above. The BLM encourages public input to manage the resources in the best way possible.

OUTDOOR RECREATION

Recreation programs are managed according to multiple use principles unless otherwise specified by law or BLM policy. The mission of the program is to ensure the continued availability of quality outdoor



recreation opportunities and experiences that are not readily available from other sources. Recreation use is managed in order to protect the health and safety of visitors; to protect natural, cultural, and other resource values; to stimulate public enjoyment of public lands; and to resolve user conflicts.

A broad range of outdoor recreation opportunities such as backpacking, camping, sight-seeing,

and motorcycling, will continue to be provided for all segments of the public, commensurate with demand. Trails and other means of public access will continue to be maintained and developed where necessary to enhance recreation opportunities and allow public use. Recreation resources will continue to be evaluated on a case-by-case basis as a part of project-level planning. Such evaluation will consider the significance of the proposed project and the sensitivity of recreation resources in the affected area. Stipulations will be attached as appropriate to ensure compatibility of projects with recreation management objectives.

Recreation use is managed in order to protect the health and safety of visitors.

• DEVELOPED RECREATION

The Simon Canyon Recreation Area Management Plan (USDI, BLM 1985e) provides detailed management direction for Simon Canyon Recreation Area and Area of Critical Environmental Concern.

The San Juan Management Framework Plan (USDI, BLM 1979c) provides general management direction for Angel Peak Recreation Area.

• DISPERSED RECREATION

Current management direction for dispersed recreation opportunities is provided for in the Code of Federal Regulations 8300 and subsequent BLM manuals. Detailed direction for primitive and unconfined types of recreation can be found in the Bisti Wilderness Management Plan and will be provided for in the De-na-zin Wilderness Management Plan. The Ah-shi-sle-pah Wilderness Study Area is administered under the Wilderness Interim Management Policy concerning recreation opportunities.

• MOTORIZED RECREATION

It is BLM policy that all public lands be designated as "open," "limited," or "closed" to motorized vehicle use. Public lands in the Farmington Resource Area will be designated "open" to motorized vehicles unless an interim, standard, or emergency closure designation is in effect or needed to restrict or close areas in order to protect resources, reduce user conflicts, and/or enhance public safety.

• RECREATION OPPORTUNITY SPECTRUM (ROS)

The BLM utilizes the ROS as a framework for defining outdoor recreation opportunity environments. It is the management tool for inventory, planning, and administration of outdoor recreation resources on public lands. Refer to BLM Manual 8320 for details.

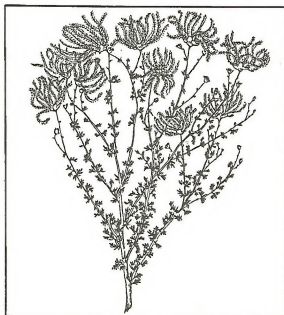
ROS MANAGEMENT OBJECTIVES

Of the six ROS classes, the Farmington Resource Area has established five ROS class objectives. The chart below displays the public land acreages per ROS class management objective.

ROS OBJECTIVE	ACREAGE
Primitive (P)	= 10,000
Semi-primitive non-motorized (SPNM)	= 24,000
Semi-primitive motorized (SPM)	= 180,000
Roaded Natural (RN)	= 886,400
Rural (R)	= 30,000
Urban (U)	= 0

(ROS Study Area = 1,130,400 acres)

Special Management Areas recommended for and designated in the FRMP will contain the ROS



class management objective in their prescriptions, if applicable.

• PROGRAM DIRECTION

The outdoor recreation program will use the Recreation Opportunity Spectrum as a basic tool for inventory and management to ensure the general public the continued variety of quality recreational opportunities. Providing opportunities for back-country recreation and more developed types of recreation close to major urban areas will be stressed. Motorized vehicle recreation including off-road and off-highway vehicle use will be maintained to the greatest extent possible under existing policy. A concentrated effort will be made to locate and establish use areas and trails compatible with social and natural environments in close proximity to heavily populated areas.

Efforts will continue to ensure consistency with on-going river and open space planning by San Juan County and the city of Farmington.

The dynamic nature of this program and its close association with the Bureau's public image program and volunteer efforts may result in many shifts in management direction in the near future. Consistency may be complicated by recommendations and decisions resulting from on-going efforts like the New Mexico Statewide Comprehensive Recreation Plan (1986), the President's Commission on American Outdoors Report (1987), the Continental Divide National Scenic Trail Comprehensive Plan (1986), and guidance under the Wild and Scenic Act. Continuing efforts will be made to ensure consistency with on-going river and open space planning by San Juan County and the city of Farmington. Inventories of the La Plata, Animas and San Juan Rivers may be evaluated for potential eligibility under the Wild and Scenic Rivers Act to coincide with future local land-use planning.

The following table summarizes valid decisions brought forward from previously approved MFPs. These decisions will continue to be implemented as a part of the proposed plan.

TABLE 1-2: SUMMARY OF MANAGEMENT FRAMEWORK DECISIONS

SAN JUAN MFP

RESOURCE	DECISION NO.	SUMMARY
Lands	L-4.1	Remove five unauthorized structures from public lands (in San Juan County) for public safety and improved management.
Lands	L-4.2	Resolve the Arnold Ranch occupancy trespass.
Lands	L-4.3	Resolve the agricultural trespass occurring in T.29N., R.10W., Secs. 26 and 27 NMPM.
Lands	L-4.5	Resolve Navajo trespass occupancies within the Resource Area by exchange.
Lands	L-5.1	Develop activity plans for existing communication sites on South Bluff, south of Aztec, Lybrook, south of Blanco and on Huerfano Mountain.
Lands	L-6.2	Determine access needs & incorporate these needs into a transportation plan. Identify & rehabilitate all unnecessary roads.
Minerals	M-1.1	Review all lists of parcels submitted for simultaneous drawing, regular competitive, and non-competitive offer to lease filings.
Minerals	M-3.1	Designate sites for material disposal, taking into account spacing between sites to reduce haul costs.
Forestry	F-1.1	Conduct a release thinning and a salvage cut on 3,830 acres of productive forest land in the Laguna Seca Mesa area.
Forestry	F-1.2	Conduct salvage logging and weeding operations on non-productive forest lands when possible, depending on market demand and lumber industry interest.
Forestry	F-2.1	Conduct an intensive woodlands product inventory.
Range	RM-1.1	Develop a transportation system which will serve the needs of the Range Management Program.
Range	RM-1.3	Implement control measures on prairie dog populations where critical resource damage is occurring.
Range	RM-2.1	Provide forage for 23 wild and free-roaming horses on the Rosa Community Allotment.
Watershed	W-1.1	Increase or maintain protective ground cover on approximately 137 allotments by employing intensive grazing management. Priority areas are Gobernador, Largo, Pine and Cereza Creek watersheds.
Watershed	W-1.2	Restrict surface-disturbing activities on identified fragile watersheds and manage for watershed values.

TABLE 1-2 (Continued): SUMMARY OF MFP DECISIONS

SAN JUAN MFP (Continued)		
RESOURCE	DECISION NO.	SUMMARY
Watershed	W-1.4	Treat approximately 6,623 acres of big sagebrush by spraying with herbicides.
Watershed	W-1.5	Implement watershed tillage practices on 3,331 acres of grassland or treated sagebrush sites in the planning unit.
Watershed	W-1.6	Install water control structures where feasible.
Watershed	W-1.10	Continue to study rehabilitation measures for oil and gas drilling pads where past efforts have not been successful.
Watershed	W-1.11	Maintain existing water control structures.
Watershed	W-1.12	Work with state and local governments to ensure that dangers and impacts of flood flows from public lands are recognized.
Watershed	W-1.15	Monitor the water quality of the larger ephemeral drainages with streamflow stations and peak flow gages.
Watershed	W-2.3	Conduct a water quality survey of all developed ground waters and potential ground water developments such as seeps or artesian flows.
Watershed	W-2.5	Ensure that proper disposal of toxic waste from oil and gas wells is accomplished.
Wildlife	WL-2.1	Acquire deeded lands to be managed as key big game seasonal ranges.
Wildlife	WL-2.2/2.3	Continue to do mechanical treatments of sagebrush and piñon-juniper woodlands for wildlife habitat improvement.
Wildlife	WL-2.6	Design livestock grazing systems on big game year-long ranges to increase total composition of cool season grasses, forbs, and browse.
Wildlife	WL-2.14/4.4	Initiate range and wildlife water projects with a goal of providing 384 acre-feet of water for big game.
Wildlife	WL-2.18	Within known antelope ranges, do not authorize changes in kind of livestock from cattle to sheep.
Wildlife	WL-2.21	Restrict surface-disturbing activities on designated wildlife winter ranges from December 1 through March 30.
Wildlife	WL-4.5	Fence one to five acres in drainages above new stock ponds and erosion control structures to provide for game bird habitat.

TABLE 1-2 (Continued): SUMMARY OF MFP DECISIONS

SAN JUAN MFP (Continued)

RESOURCE	DECISION NO.	SUMMARY
Recreation	R-2.1/3.1	Develop a River Management Activity Plan for the San Juan and Animas River tracts to develop recreation opportunities.
Recreation	R-8.1	Develop a Cooperative Management Plan with other state and federal agencies for management of public lands around Navajo Lake.
Recreation	R-9.1	Develop a Recreation Area Management Plan for Angel Peak Recreation Area.

CHACO MFP

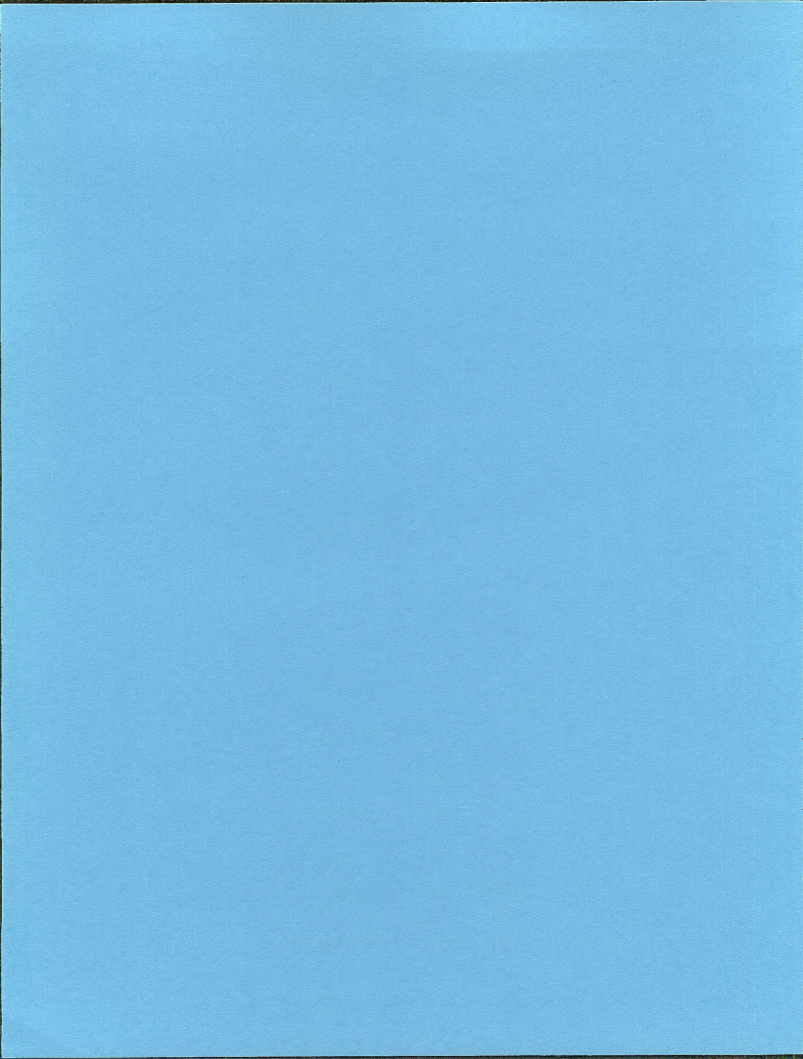
RESOURCE	DECISION NO.	SUMMARY
Lands	L-6.1 thru 6.5	Complete withdrawal reviews on all BIA/Indian holdings off-reservation.
Lands	L-8.1	Encourage exchange proposals for the scattered tract public lands.
Minerals	M-1.1	Continue consideration and analysis of potential coal tracts for leasing.
Minerals	M-3.1 thru 3.6	Review the withdrawals of PLO 2198 and EO 1483.
Range	RM-2.2	Complete a cost/benefit analysis on treating big sagebrush in the east pasture of the Escavada Allotment AMP.
Watershed	W-1.1	Quantify all BLM water use and secure state appropriate water rights.
Watershed	W-1.2	Protect the physical and legal availability of all existing water sources on federal coal leases by appropriate lease stipulations.
Watershed	W-1.3	Develop coal lease stipulations or other methods for BLM acquisition of water wells used for reclamation or energy development after lease abandonment.
Watershed	W-2.1	Reduce sediment and salinity in surface runoff by including best management practices in all activities in areas which contribute more than one AF/mi ² /yr of sediment.
Watershed	W-2.2	Close unnecessary roads.
Wildlife	WL-1.1/1.2	Establish suitable buffer zones around eagle and falcon nests. Also, do not allow rodent control near active eagle nests.



Proposed Resource Management Plan

Chapter 2





CHAPTER 2

Proposed Resource Management Plan

INTRODUCTION

This chapter presents the Proposed Plan. It is arranged in sequence beginning with a description of each planning issue theme and ending with the procedure for implementation of the plan. It also describes the proposed resolution of each issue and the rationale used to arrive at solutions.

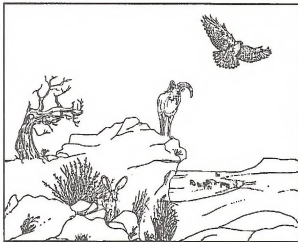
HOW THE PLAN WAS SELECTED

The plan is proposed by the Bureau through a special projects team. The team is composed of an interdisciplinary group of resource professionals and a core team of planners and technical specialists working under the guidance of the Resource Area Manager. The planning effort was complemented by the District Manager and State Director and respective staffs through consistency reviews and direct preparation of supporting analysis and narrative.

The Plan was selected by the Bureau with direct public involvement through work groups and liaisons and through public input received during the formal 90-day comment period. The Proposed Plan is a modified version of the Preferred Alternative (Alter-

native D) presented in the Draft RMP with changes that incorporated aspects of other alternatives based on public comment.

The Proposed Plan contains the general direction the Bureau would pursue during the 10- to 20-year life of the plan. The proposed resolutions are considered an effective tool for adequately resolving the issues identified. The Proposed Plan provides for a combination of resource uses that would protect important environmental values and sensitive resources while at the same time allowing development of resources which provide commercial goods and services.



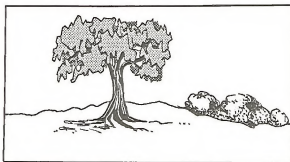
ISSUE #1

LAND OWNERSHIP ADJUSTMENTS

THEME

Small, scattered, and isolated tracts of public land which are especially difficult to manage should be exchanged or disposed of to improve management efficiency. Also, certain lands not currently in public ownership have been identified as important to effective management and therefore have been targeted for acquisition.

The basic concept of land ownership adjustments is to consolidate administrative boundaries to create a more efficient and economical land ownership pattern.



PROPOSED RESOLUTION

Areas for retention, exchange, and acquisition of lands have been identified (see Map 2-1). With the exception of the Special Management Areas identified, all public lands south of the land ownership adjustment line would be available for exchange or disposal.

One of the items stated in the Navajo Tribal Code (Title 16, Chapter 1) as policy for the Navajo Tribe is that Indian holdings within the "checkerboard" areas should be consolidated wherever the best interests of the Navajo residing in the area and the Navajo Tribe are served by such consolidation. The Proposed Resource Management Plan and this Tribal policy are complementary and could be pursued jointly by the Tribe and the BLM.

On any land exchange proposal, the Bureau will attempt to acquire non-BLM lands in the public interest. Priority has been set for land acquisition within the Farmington Resource Area as follows: (1) non-BLM lands within SMAs, (2) acquisition zones, and (3) any non-public lands inside the retention zone. See Appendix 2 for a listing of lands identified for acquisition. Lands inside the exchange zone could be used to acquire non-public lands inside acquisition zones identified in other RMPs within the state of New Mexico. Land ownership adjustments of federal lands within the retention zone will be allowed through patents which are consistent with multiple use management objectives for the area. Similarly, land exchanges can occur inside the retention zone as long as there is no major net reduction of federal lands within that zone. Land sales within the retention zone will be allowed only for parcels listed in Appendix 2.

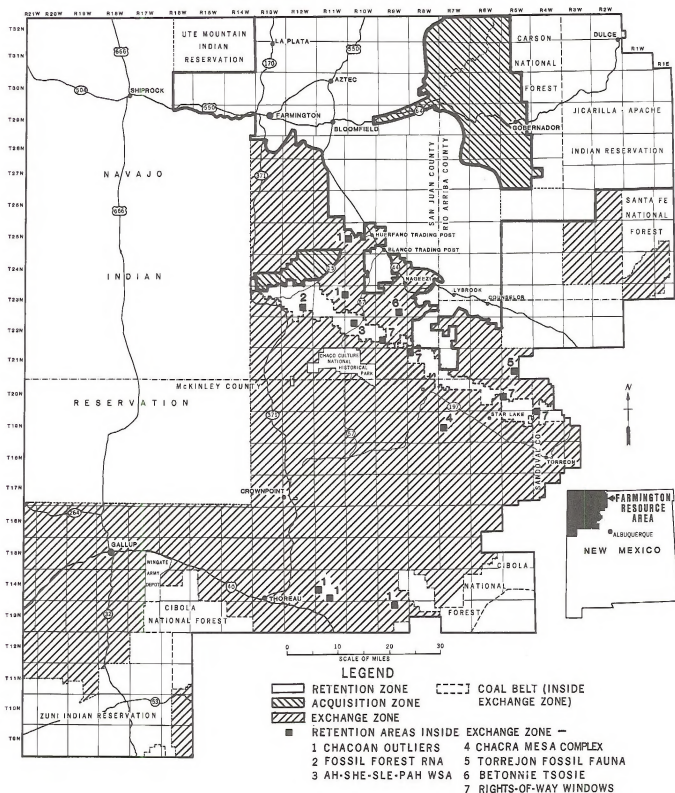
RATIONALE

The resolution of this planning issue requires that land ownership be adjusted (exchanged, disposed, and/or acquired) to facilitate more efficient management. The proposed actions will accomplish this goal, not only for the BLM, but for the state of New Mexico and the Navajo Tribe, both of which have stated long-term land consolidation goals. In the exchange zone, the proposed actions will minimize occupancy and unauthorized use of public lands by transferring the ownership of those lands.

IMPLEMENTATION

Implementation would be accomplished by acquiring non-BLM lands within SMAs and in the acquisition zones. Other land ownership adjustment actions would be considered on a case-by-case basis and as stated in Appendix 2.

FARMINGTON RESOURCE AREA



MAP 2-1
LAND OWNERSHIP ADJUSTMENTS

ISSUE #2

HOME USE FUEL SOURCES

THEME

Demand for fuelwood and, to a much lesser extent, coal for home heating has increased dramatically during the past decade. At present the demand for fuelwood is at the estimated maximum that can be supported on a sustained yield basis. Increased regulation of fuelwood cutting is needed to prevent conflict with other program activities or damage to other natural resources while ensuring that the Resource Area's limited woodland resources are not over-harvested.

The main questions addressed by this issue are: which public lands should be open to sale of fuel resources, where can fuelwood cutting be used as a tool to reduce conflicts and enhance management, and should additional licenses be issued for domestic coal use?

PROPOSED RESOLUTION

Dead-and-down fuelwood collection would be allowed Resource Area-wide unless collection conflicts with management goals of SMAs, or resource conflicts and/or degradation would occur. Greenwood cutting would be allowed only for range, forestry, or wildlife habitat improvement projects or in areas proposed for surface mining. The existing domestic coal licenses on public lands would continue to be managed by the BLM. New domestic coal license applications would be considered on a case-by-case basis.

RATIONALE

Special Management Area prescriptions will protect those areas where wood cutting and gathering activities could damage sensitive resource values. Greenwood cutting allowed prior to surface mining, vegetative treatments, or other public land improvement projects will allow the public to salvage fuel resources which would otherwise be under utilized or

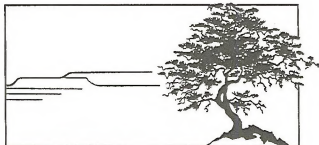
unrecoverable. Continued supervision of greenwood and commercial wood cutting is essential to ensure that over-harvest does not occur. Testimony given during public hearings indicated a need to continue or expand licenses for domestic coal use. Potential problems with reclamation and prior existing rights will require careful case-by-case analysis of future applications.

IMPLEMENTATION

All applications for greenwood cutting and domestic coal licenses will be handled on a case-by-case basis.

The following SMAs will be signed as closed to wood cutting and gathering and monitored to ensure compliance:

Simon Canyon Recreation Area
Angel Peak Recreation Area
Navajo Refugee Sites
Bald Eagle ACEC
River Tracts
Thomas Canyon
Negro Canyon
Reese Canyon RNA
Carracas Mesa
Aztec Gilia ACEC
Bisti Wilderness
De-na-zin Wilderness
Ah-shi-sle-pah Wilderness Study Area
East Side Rincon Site
Pierre's Site ACEC
Halfway House ACEC



ISSUE #3

SPECIAL MANAGEMENT AREAS

THEME

There are primarily two reasons for identification of this RMP issue. Some locales on public lands which contain known special or sensitive resource values that were or could potentially be destroyed are not effectively being protected on a day-to-day basis under current management practices. There are also certain areas where inherent conflicts have developed between competing uses that needed to be minimized or eliminated. This leads to the formulation of two crucial planning issue questions that need resolution - what areas should be identified for special management attention and how should they be managed?

PROPOSED RESOLUTION

Special Management Area (SMA) status was considered for areas, identified by Bureau specialists and the public, which contain special resource values. The SMAs that were previously designated by law such as the Bisti Wilderness or areas carried forward for further study in previous planning efforts were included. The existing SMAs and those proposed in the RMP are listed in Table 2-1. Appendix 1 contains a general description of resource values, administrative goals, management prescriptions and maps for each SMA. Not all SMAs are specifically located on maps due to highly sensitive resource values such as cultural sites, endangered species habitat or raptor nesting territories. Those doing project work on-the-ground and unsure of exact boundary locations will be notified upon application receipt.

RATIONALE

Resolution of the planning issue lies in the proposed SMAs that are identified for special management. Their respective goal statements emphasize the land allocation on how each SMA will be

administered. Bureau management philosophy was to designate a representative sample of special areas for administration in an SMA system. This system would contain the spectrum of special resource values and uses available in the Farmington Resource Area. Formal designation names, goals, and prescriptions are area-specific and designed for the individual SMA. Not all locales on public lands that contain special values or uses are proposed as SMAs. Those SMAs identified but not proposed were already represented in the system or did not require special attention above that afforded by existing management practice. SMA size and boundary locations were reserved to that which could be effectively managed and restrictive use prescriptions were confined to those reasonably necessary to protect values. Future law, policy guidance, or resource data may require additions to the system to meet legislative mandates or public demand or to expand the spectrum representation.

IMPLEMENTATION

Each SMA description contains management prescriptions. Many of the prescriptions will be implemented upon RMP approval. Some SMAs will require activity and project level planning to achieve goals which may result in boundary adjustments, revised prescriptions and further environmental analysis with public involvement. Changes will not normally require a planning amendment unless a change in land-use allocation is proposed.

Program-specific inventory and monitoring of resources will continue Resource Area-wide which may uncover new areas not currently represented in the SMA system.

Individual implementation plans for all ACECs are slated for completion by FY-90 by incorporating special attention measures in existing activity plans or preparation of separate plans.

TABLE 2-1: SPECIAL MANAGEMENT AREAS

RECREATION

Dunes Vehicle Recreation Area
 Head Canyon ORV Competition Area
 Simon Canyon Recreation Area & ACEC
 Angel Peak Recreation Area & ACEC
 Carracas Mesa
 Thomas Canyon
 Negro Canyon
 Glade Run Trail System
 Continental Divide Corridor

WILDERNESS

Bisti Wilderness
 (a) Badlands ACEC
 De-na-zin Wilderness
 (a) Log Jam ACEC
 (b) Lost Pine ACEC
 Ah-shi-sle-pah Wilderness Study Area

MINERALS

Beechatuda Tongue
 Coal Belt

WILDLIFE

The Hogback ACEC
 Reese Canyon Research Natural Area
 Aztec Gilia ACEC
 River Tracts
 Bald Eagle ACEC

PALEONTOLOGY

Torreon Fossil Fauna ACEC
 Kutz Canyon Paleontological Area
 Betonnie Tsosie
 Fossil Forest Research Natural Area

LANDS

Right-of-Way Windows (4)
 (a) Torreon
 (b) Continental Divide
 (c) Escavada
 (d) Betonnie Tsosie

WATERSHED

Farmington Lake Watershed

FORESTRY

Laguna Seca Mesa

CULTURAL RESOURCES

Navajo Refugee Sites (26)
 (a) Shepherd Site
 (b) Crow Canyon District ACEC
 (c) Hooded Fireplace & Largo School District ACEC
 (d) Tapacito and Split Rock District ACEC
 (e) Frances Ruin ACEC
 (f) Christmas Tree Ruin ACEC
 (g) Simon Ruin
 (h) San Rafael Canyon ACEC
 (i) Romine Canyon Ruin
 (j) Prieta Mesa Site
 (k) Delgadito Pueblito
 (l) Cagle's Site
 (m) Adams Canyon Site
 (n) Casa Mesa Diablo
 (o) Rincon Rockshelter
 (p) Hill Road Ruin
 (q) Gomez Point Site
 (r) Gomez Canyon Ruin
 (s) Adolfo Canyon Site
 (t) Unreachable Rockshelter
 (u) Compressor Station Ruin
 (v) Foothold and Overlook Ruins District
 (w) Pointed Butte Ruin
 (x) Rincon Largo District
 (y) Kin Yazhi (Little House)
 (z) Canyon View Ruin
 Native American Traditional Use & Sacred Areas (4)
 (a) Gobernador Knob
 (b) Tanner Lake Battlefield
 (c) Salt Point ACEC
 (d) Huerfano Mesa
 East Side Rincon Site
 Chaco Outliers Group (8)
 (a) Kin Nizhoni
 (b) Pierre's Site ACEC
 (c) Halfway House ACEC
 (d) Twin Angels ACEC
 (e) Jacques Site
 (f) Andrews Ranch
 (g) Holmes Group
 (h) Casamero Community ACEC
 Chacra Mesa Complex & ACEC
 Farmer's Arroyo Site

ISSUE #4

COAL LEASING SUITABILITY ASSESSMENT

THEME

Competitive leasing of coal tracts in the Farmington Resource Area was addressed in detail in the San Juan River Regional Coal EIS (USDI, BLM 1984a). In that document 39 tracts were brought forward for consideration in future land use planning. As the next step in the planning process, the draft Farmington RMP considered only two questions under this issue. These were: (a) are there any areas which should be considered for coal leasing that were not identified by previous planning efforts, and (b) after application of the four land use planning screens, which tracts previously identified under round one of the coal program should be carried forward for further consideration for leasing?

PROPOSED RESOLUTION

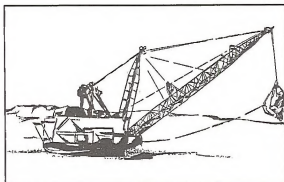
Bring forward the following 17 competitive coal tracts for further consideration for leasing:

- Bisti #1 (in part)
- Bisti #4 (in part)
- Bisti #6/8
- Catalpa Canyon
- Chico Wash South (in part)
- Crownpoint East (in part)
- Divide
- Gallo Wash #1
- Kimbeto #2
- La Plata #1
- La Plata #3
- Lee Ranch East
- Lee Ranch Middle (in part)
- Lee Ranch West
- Star Lake East #1
- Star Lake West #2
- Sundance

These tracts have a total area of 60,698 acres and contain an estimated 478.9 million tons of coal.

RATIONALE

No new tracts were identified (by BLM or industry) to be added to the list developed during the San Juan River Regional Coal EIS. Application of the four land use planning screens resulted in carrying forward the 17 tracts listed in the proposed resolution and dropping the other 22 tracts. This does not



mean all 17 will be leased, only that they will be brought forward for further consideration for leasing. Public comments indicate that some individuals and groups are confused as to the planning issue in the RMP. The assessment incorporated in the RMP is an administrative procedure and will not directly result in actual impacts. Analysis of actual impacts from mining occurs later during the pre-lease activity planning and post-lease mine planning stages. It is not known at this time what the impacts would be because when or if industry will apply to lease any of the tracts is an unknown factor. Detailed site-specific analysis could be outdated by the time leasing occurred.

IMPLEMENTATION

Site-specific analysis at the activity planning stage will examine the specifics of individual tracts on a case-by-case basis.

ISSUE #5

TRANSPORTATION

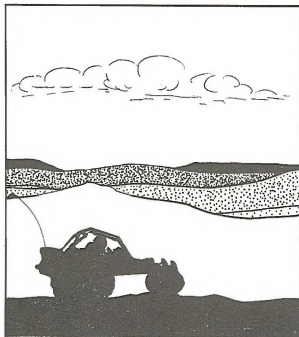
THEME

This two-fold issue involves off-road vehicle (ORV) designations and access to public lands.

It is BLM policy by Executive Order that all public lands be designated as "open, limited, or closed" to vehicle travel (refer to the glossary for definitions). Vehicle travel is to be restricted on lands where there is actual or a realistic potential for adverse resource degradation, user conflicts, safety hazards or where the use is incompatible with management objectives.

Access to some public lands has been a problem for both administrative and public purposes due to restricted travel across private lands.

The major planning issue questions needing resolution are: what areas or routes should be designated as "open, limited, or closed" to vehicle travel and where should easements be acquired to provide access to public lands?



PROPOSED RESOLUTION

Table 2-2 contains a list of proposed ORV designations. These designations are designed to effectively manage and protect public land resources and values while not unduly restricting compatible opportunities for use and enjoyment of public lands.

There will be a concerted effort to intensively implement and monitor the ORV designations as well as actively enforce regulations. A map/brochure for public distribution is planned along with placement of signs and fences. Patrol/surveillance schedules are prescribed.

In areas designated "open" where there are no restrictions to vehicle travel, a pro-active management approach utilizing public education techniques and informational signs will be pursued to inform vehicle operators of the effects of driving off-road.

Future vehicle restrictions will be implemented through emergency closures to prevent resource degradation, minimize user conflicts, and promote public safety.

Easement acquisition needs have been identified to provide for administrative and public access to public lands (see Appendix 2).

RATIONALE

Program-specific inventory has identified areas, roads, and trails that have been impacted by vehicle activity and those that have a realistic potential to exhibit impacts in the future. These areas have been proposed for a restrictive ORV designation. The level of restriction is that which is adequate to resolve the problems occurring or anticipated or is one that is most compatible with established resource management objectives.

Areas and trails that have incurred traditional vehicle use which are considered de facto vehicle

recreation sites have been designated for management of such use. The primary use of recreational ORV activity indicates a public demand that is compatible through historical inference and is considered the appropriate land allocation for those sites.

The majority of public lands in the FRA contain an extensive road system which characterizes vehicle use as off-highway or on-road. Off-the-road vehicle travel has been assessed as incidental use and impacts are negligible or non-existent. Because use is not anticipated to increase substantially for the life of this plan, adverse impacts are not expected to occur.

Therefore, and "open" designation is proposed for these public lands that are not expected to incur adverse resource effects, substantial user conflicts or contain safety hazards not inherent to the existing environment.

IMPLEMENTATION

The proposed ORV designations will be implemented according to Appendix 3. Easement acquisition will proceed on a case-by-case basis and will generally be implemented in the order they appear in Appendix 2.

TABLE 2-2: PROPOSED ORV DESIGNATIONS

"Limited" Designation

Chacra Mesa Complex
 Chaco Outliers Group
 The Hogback ACEC
 Reese Canyon RNA
 Aztec Gilia ACEC
 River Tracts
 Bald Eagle ACEC
 Torrejon Fossil Fauna ACEC
 Kutz Canyon Paleontological Area
 Betonnie Tsosie
 Farmington Lake Watershed
 Ah-shi-sle-pah WSA
 Simon Canyon (partial)
 Head Canyon ORV Competition Area
 Angel Peak Recreation Area
 Carracas Mesa
 East Side Rincon Site
 Navajo Refugee Sites
 Native American Traditional Use & Sacred Areas
 Continental Divide Corridor
 Glade Run Trail System

"Closed" Designation

Farmers Arroyo Site
 Beechatuda Tongue
 Fossil Forest RNA
 Bisti Wilderness
 De-na-zin Wilderness
 Thomas Canyon
 Negro Canyon
 Simon Canyon (Partial)

"Open" Designation*

Dunes Vehicle Recreation Area
 Laguna Seca Mesa
 Coal Belt
 Right-of-Way Windows

* Other public lands in the Farmington Resource Area that are not included within the SMAs described in this table will be designated "open."

ISSUE #6

VEGETATIVE USES

THEME

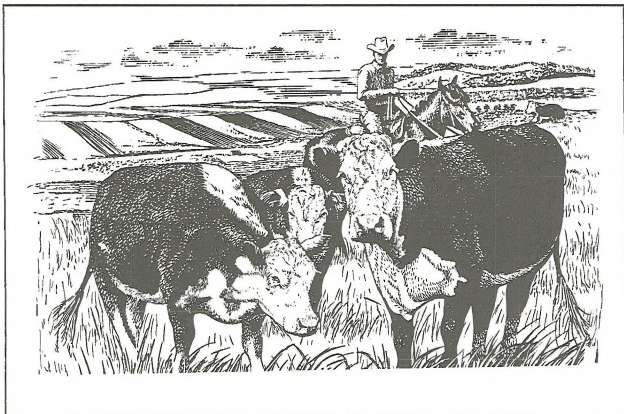
Correct levels of vegetative use for livestock, wildlife, and watershed production needed to be determined for the southern portion of the Farmington Resource Area not analyzed by the San Juan Grazing Management EIS. Compliance with National Environmental Policy Act requirements necessitated the vegetative use analysis.

Because proposals in the land ownership adjustments issue would result in exchange or sale of public lands in certain allotments covered by a Memorandum of Understanding (MOU) between the BLM, the BIA, and the Navajo Tribe, and retention of public lands and possible acquisition of non-public lands in other allotments also covered by the MOU, the MOU needed to be examined for validity and possible adjustment.

PROPOSED RESOLUTION

A range inventory has been conducted for the purpose of designating ecological condition, determining the selective management category, and identifying existing range improvements for the grazing allotments. The inventory information will be used in conjunction with the categorization process to set initial stocking levels, which will be monitored to determine their validity. Upon completion of the monitoring program, the vegetation will be managed to ensure that the proper use levels of the key forage species are not exceeded, to improve or maintain ecological condition and vegetative productivity, and to provide for the protection of crucial wildlife habitat and critical watersheds.

It is anticipated that existing levels of vegetative use on "M" category grazing allotments would be



maintained and levels adjusted to protect existing resource values on "C" category allotments. Necessary actions on "I" category allotments would be taken to attain "M" category status for those allotments (refer to the glossary for definitions). The grazing MOU with the BIA and the Navajo Tribe would be cancelled for allotments in the retention zone, and allotments lying wholly or partially within the wilderness areas. On these allotments the BLM would regain administrative control of day-to-day grazing management activities. The MOU would be continued and possibly expanded in the exchange zone until the public lands are exchanged or disposed of. Range improvement funding for allotments in the exchange zone would be limited to those projects that can be depreciated before mining and/or exchange or disposal of the public lands.

Estimates of the short- and long-term adjustments in allowable livestock grazing use to be proposed are displayed in Table 2-3. The actual short- and long-term adjustments implemented would be based on a five-year program of vegetative monitoring studies.

RATIONALE

The proposed actions would enable the BLM to comply with the multiple use/sustained yield mandates of FLPMA and would result in compliance with the National Environmental Policy Act. The proposed actions would also allow the BLM to regain administrative control for MOU allotments located in retention zones and the wilderness areas.

IMPLEMENTATION

Implementation will be accomplished using the monitoring program described above in conjunction with a grazing decision process that incorporates consultation, coordination, and cooperation with the affected allottees and/or other affected parties in accordance with Section 8 of the Public Rangelands Improvement Act. Consultation with the BIA and the Navajo Tribe to adjust the MOU will also be part of the consultation process.

TABLE 2-3: SUMMARY OF ESTIMATED CHANGES IN AUMS

Short-term AUMs available	33,851
Net Change from Current Use	-25,822
Net Change from Preference	-28,282
Allotments Receiving Adjustments	21
Long-term AUMs Available	46,768
Net Change From Current Use	-12,905
Net Change From Preference	15,174
Allotments Receiving Adjustments	21

Note: The figures shown above were calculated from data reported for grazing allotments actually inventoried and do not incorporate AUMs allocated to uninventoried allotments. Current use for all issue area allotments is 75,737 AUMs. Federal preference AUMs for all issue area allotments is 78,197.

ISSUE #7

RIGHT-OF-WAY CORRIDORS AND WINDOWS

THEME

There is a need to ensure that linear rights-of-way are developed so as to minimize adverse impacts on other public resources. To do this it will be necessary to determine which public lands in the Resource Area should be designated as utility corridors or windows, which lands should have restrictions or prohibitions on right-of-way development, and what land-use restrictions should be placed on the public lands within the identified corridors or windows.

PROPOSED RESOLUTION

Right-of-way windows would be designated (see Appendix 1, Right-of-Way Windows SMA). The windows would be managed to promote the placement of rights-of-way as the best use within those areas. Conversely, some of the Special Management Areas have management prescriptions which would exclude the location of rights-of-way within their boundaries. A right-of-way can be approved across public surface within the coal SMA, however, stipulations would be placed in the right-of-way grant which would require the grantee to bear the expense of relocating the facility if coal is leased and mining operations occur.

The remainder of the Resource Area would be open to the location of rights-of-way on a case-by-case basis with normal environmental review.

RATIONALE

The right-of-way window concept identifies strategic areas which are needed for right-of-way locations. Stipulations or management prescriptions will then be designed to eliminate actions (buildings, airstrips, or surface mining) which would conflict with rights-of-way inside those windows. See Appen-

dix 4 for a discussion of the right-of-way window concept, including advantages to the window concept over the corridor approach.

IMPLEMENTATION

To implement the proposed actions the following right-of-way windows will be designated to ensure development of linear rights-of-way (see the map and description for the Right-of-Way Windows SMA in Appendix 1):

Torreón
Continental Divide
Escavada
Betonnie Tsosie

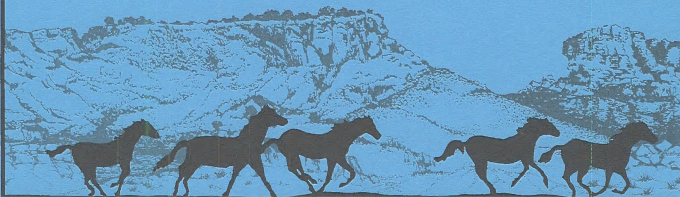
The following Special Management Areas have management prescriptions that preclude the location of rights-of-way and that result in designation of those areas as exclusion areas subject to valid existing rights:

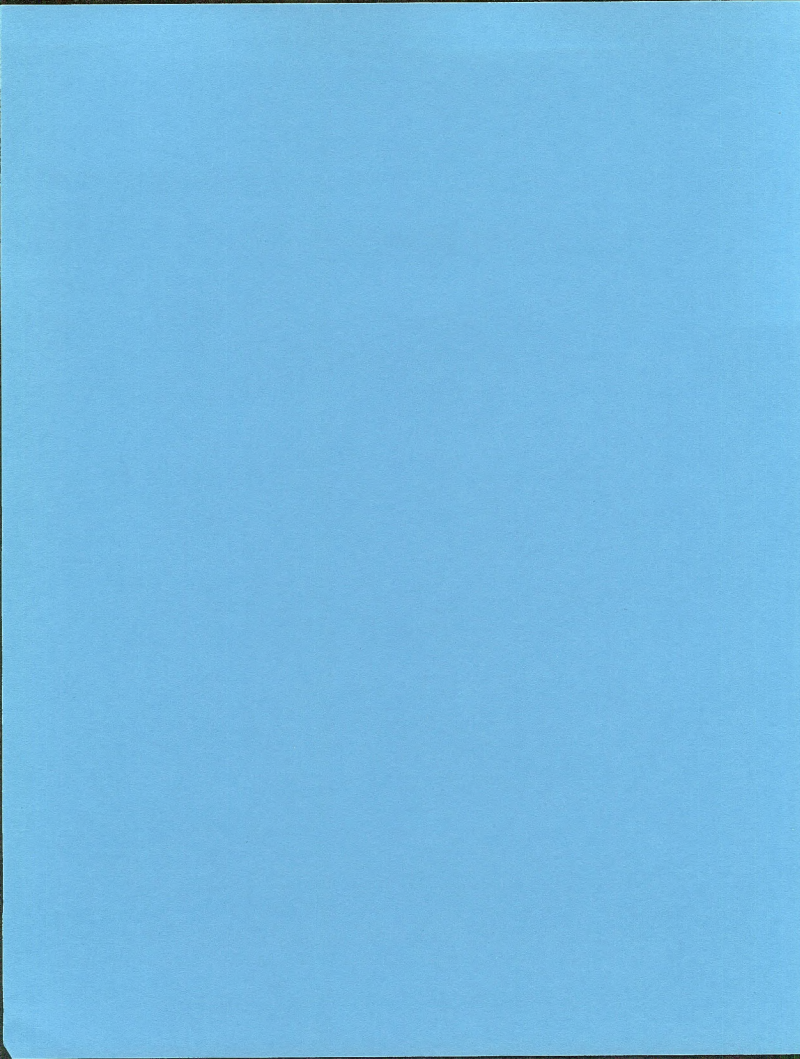
Carracas Mesa
Thomas Canyon
Negro Canyon
Bisti Wilderness
De-na-zin Wilderness
Ah-shi-sle-pah Wilderness Study Area
Navajo Refugee Sites
Native American Traditional Use &
Sacred Areas
East Side Rincon Site
Holmes group
Farmer's Arroyo Site
Beechutada Tongue

The remaining SMAs contain management prescriptions that require special stipulations for informed placements before an application can be granted. The remainder of the Resource Area would be available for rights-of-way on a case-by-case basis.

Environmental Impact Statement

Chapter 3





CHAPTER 3

Environmental Impact Statement

PURPOSE AND NEED

The purpose of and need for this environmental statement is to assess the environmental effects of implementing a reasonable range of alternatives for public land management to resolve land-use planning issues.

This chapter presents the existing resources and values that may be affected by the proposed actions (Affected Environment). This section is preceded by a description of alternatives considered in the Draft RMP referring the reader to Chapter 2 for a descrip-

tion of the Proposed RMP. This chapter concludes with a summary of the environmental consequences expected from each alternative.

The four alternatives presented were formulated by the Bureau as a result of direct participation of individuals and special interest groups who were involved in this planning effort. Additional public input was also sought during the formal 90-day public comment period during review of the draft. The public involvement strategy employed and a partial listing of the individuals and organizations who participated is presented in Chapter 4.



Description of Alternatives Including the Proposed Action

The Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) require the identification of a proposed action and/or preferred alternative, as well as a reasonable range of alternatives that could result in the resolution of the issues. *Refer to Chapter 2, Proposed Resource Management Plan, for a description of the proposed action.*

The Draft RMP identified four alternative Resource Management Plans which are presented in this section. The first alternative discussed represents a continuation of current management practices; for the purpose of the RMP/EIS, this constitutes the No Action Alternative. The second alternative stresses resource conservation and the third, the production of commodity resources. The fourth, the Preferred Alternative, provides for a variety of uses by incorporating features of the No Action, the Resource Conservation, and the Resource Production Alternatives.

The alternatives were developed as a range of reasonable combinations of resources uses and management practices.

These alternatives were developed as a range of reasonable combinations of resource uses and management practices to respond to the planning issues and provide, in combination with the Continuing Management Guidance, management direction for all resources. They also provide a distinct choice among potential management strategies. Each alternative conforms to FLPMA policy that the public lands be managed on the basis of multiple use and sustained yield.

A "no grazing" alternative was initially proposed for the vegetative uses issue. However, since this "no-grazing" alternative would not conform to the BLM requirement that alternatives be feasible, practical, and implementable, it was eliminated from consideration.

ALTERNATIVE A: CURRENT MANAGEMENT (NO ACTION) ALTERNATIVE

• THEME

This alternative describes the current management of the resources affected by the issue questions. As with all alternatives, other resources and programs would continue to be managed as described in the continuing management guidance section of this chapter. This alternative provides a baseline for comparison of other alternatives. The management direction for this alternative was derived from existing management decisions and guidance developed in the San Juan and Chaco MFPs. Like the other alternatives, the Current Management Alternative would allow future management of the FRA to be responsive to changing regulations and policies.

1. Land Ownership Adjustments: Any adjustment in land ownership which requires a land use planning decision would be limited to those areas identified under the previous Management Framework Plans (MFPs). Specifically, 6,078 acres of private land near Navajo Reservoir would continue to remain targeted for acquisition by the BLM. In terms of land ownership adjustments, 73,223 acres (114 square miles) could be transferred out of BLM administration via exchange or through the R&PP Act. The remaining public lands within the Resource Area (approximately 1,435,000 acres) would generally be retained under public ownership with BLM administration.

2. Home Use Fuel Sources: The collection of dead-and-down fuelwood would be allowed in the majority of the Area. The fuelwood made available to the public would generally be a result of wildlife habitat improvement projects, rights-of-way and well pad clearings, and from chained or chemically treated areas. Greenwood fuel collection would be allowed only in specified areas on a case-by-case basis. The Farmington Resource Area would continue to manage the two existing domestic coal licenses issued to the Nageezi, Whiterock, and Pueblo Pin-

tado/Counselor Chapter Houses. These licenses allow members of those chapters to collect federal coal for personal use. Any new request for domestic coal licenses would be considered on a case-by-case basis.

3. **Special Management Areas:** The FRA would continue to manage the following special management areas which have already been designated: Bisti Wilderness, De-na-zin Wilderness, Simon Canyon Recreation Area, The Hogback, Fossil Forest Research Natural Area, Angel Peak Recreation Area, Torrejon Fossil Fauna ACEC, Ah-shi-sle-pah Wilderness Study Area, and the Chaco Outlier Group.

Previous MFPs identified areas to be carried forward for further study and possible approval as ACECs. Those areas which are comprised of public lands administered only by the BLM include the following: *Thomas Canyon*, Negro Canyon, Rattlesnake Canyon, Carracas Mesa, Red Rocks Bluff, Bisti/De-na-zin, Gobernador Knob, Salt Point, Huerfano Mesa, Mesa Quartado, Bohanon Canyon, Gobernador and Cereza Canyon, Kutz Canyon and Lybrook.

4. **Coal Leasing Suitability Assessment:** Under the current situation, small emergency leases would continue to be processed on a case-by-case basis. The 39 competitive coal tracts, identified as a result of the Chaco/San Juan MFP Update for Coal (USDI, BLM 1981b), and analyzed in the San Juan River Regional Coal Environmental Impact Statement (USDI, BLM 1984a), would be carried forward for further consideration for leasing. This includes 2,436 million tons (1,583.1 million federal tons) of coal on 170,954 acres. No new tracts would be identified.

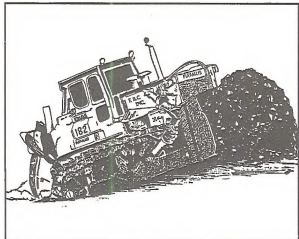


Table 3-1:

Coal Tracts Carried Forward By Alternative

Alternative A (39)

Bisti #1
Bisti #4
Bisti #6/8
Catalpa Canyon
Chico Wash South
Crownpoint East (Rev.)
Divide
Gallo Wash #1
Kimbeto #2
La Plata #1
La Plata #3
Lee Ranch East
Lee Ranch Middle
Lee Ranch West
Star Lake East #1
Star Lake West #2
Sundance
Bisti #2
Bread Springs #1
Bread Springs #2
Crownpoint NE
Gallo Wash #2
Gamerco #1 (HC)
Gamerco #1 (LC)
Gamerco #2 (LC)
Hogback
Hospah #1
Hospah #2
Johnson Trading Post
Kimbeto #1
La Plata #2
La Plata #4
Nageezi
Pinehaven
Samson Lake #1
Samson Lake #2/2
Star Lake East LC
Tah-ha-bah Well
Twin Buttes

Alternative B (14)

Bisti #1 (in part)
Bisti #6/8
Catalpa Canyon
Chico Wash South
(in part)
Crownpoint East (Rev.)
Divide
La Plata #1
La Plata #3
Lee Ranch East
Lee Ranch Middle
(in part)
Lee Ranch West
Star Lake East #1
Star Lake West #2
Sundance

Alternatives C/D (17)

Bisti #1 (in part)
Bisti #4 (in part)
Bisti #6/8
Catalpa Canyon
Chico Wash South
(in part)
Crownpoint East (Rev.)
Divide
Gallo Wash #1
Kimbeto #2
La Plata #1
La Plata #3
Lee Ranch East
Lee Ranch Middle
(in part)
Lee Ranch West
Star Lake East #1
Star Lake West #2
Sundance

5. **Transportation:** No new ORV "closed" or "limited" designations would be implemented through the RMP. All public lands in the Resource Area currently undesignated would be designated "open," with the exception of the following areas which are already classified as "closed" or "limited" on the ORV Designation Register:

"Limited"

Ah-shi-sle-pah Wilderness Study Area
Portions of the Chaco Outlier Group
Portions of Simon Canyon Recreation Area

"Closed"

Bisti Wilderness Area
De-na-zin Wilderness Area
Fossil Forest Research Natural Area
Portions of Simon Canyon Recreation Area

Out of the 1,508,450 acres of public surface within the Resource Area, 41,637 acres are either "limited" or "closed" to ORV use. Legal and physical access needs or priorities are not identified under this alternative. Easements are acquired as needed on a case-by-case basis.

Out of the 1,508,450 acres of public surface in the FRA, 41,637 acres are either "limited" or "closed" to ORV use.

6. Vegetative Uses: The current level of authorized use and allotment supervision on the 613,625 acres of public lands in the issue area (the region outside that covered by the San Juan Grazing EIS) would be continued. Currently, the FRA maintains an MOU (Memorandum of Understanding) with the Bureau of Indian Affairs (BIA) and the Navajo Tribe for certain allotments in the issue area (see Table 3-2). This MOU is being implemented and would remain so under this alternative, with the exception that the BLM would regain administrative control of day-to-day grazing management activities on allotments lying wholly or partially within the wilderness areas.

Table 3-3 summarizes the estimated Animal Unit Months (AUMs) of allowable livestock grazing use by alternative. Table 3-2 displays estimated shortand long-term AUMs by alternative. This alternative would be used to provide baseline data for the establishment of vegetative monitoring studies.

7. Rights-of-Way Corridors and Windows: There would be no designation of rights-of-way corridors or windows under this alternative. New rights-of-way would continue to be processed on a case-by-case basis.

ALTERNATIVE B: RESOURCE CONSERVATION

• THEME

Alternative B is the Resource Conservation Alternative, which attempts to resolve the planning issues while placing primary emphasis on maintaining or improving environmental values. The outdoor recreation, visual resources, wilderness, paleontology, cultural, wildlife, watershed, and other resource conservation-oriented programs are emphasized under this alternative. The goal of this alternative is to change present management direction so that the seven issues are resolved in a manner that places highest priority on the maintenance or improvement of environmental values. Multiple use management would continue in areas not emphasized under this alternative.

1. Land Ownership Adjustments: Implementing this alternative could result in the exchange or disposal of 98,945 acres (155 square miles) of public land from federal ownership over the long term, leaving approximately 1,409,500 acres retained under BLM administration. Map 3-1 depicts the retention, exchange, and acquisition zones for Alternative B, while Table 3-4 and Figure 3-1 display exchange acreages by alternative and county. Map 3-1, and the land status map in the back pocket of the *Draft RMP* should be used together to visualize the public land pattern in these zones. With the exception of special management areas, public lands south of the land ownership adjustment line are scattered or isolated tracts and are very difficult for the FRA to manage. It is these lands that would be exchanged or disposed of. Under this alternative, priority for exchange of public lands would be for non-BLM lands within special management areas and the two acquisition zones. Approximately 54,500 acres in the outdoor recreation acquisition zone and approximately 101,350 acres in the wildlife/range/outdoor recreation acquisition zone would be targeted for acquisition.

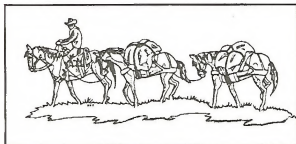


TABLE 3-2: ESTIMATED SHORT- AND LONG-TERM AUMS FOR ALLOTMENTS BY ALTERNATIVE

Allotment Number	Management Category	Alternative A		Alternative B		Alternative C		Alternative D	
		Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term
6004*	C	3,759	3,759	1,814	1,814	3,759	3,759	1,814	2,787
6005	I	449	499	628	628	1,580	1,580	628	539
6007*	C	3,485	3,485	1,445	1,445	3,485	3,485	1,445	2,465
6008*	C	764	764	436	436	764	764	436	600
6009	C	237	237	116	116	237	237	116	177
6010	M	4,559	4,559	4,559	4,559	4,559	4,559	4,559	4,559
6011*	C	3,260	3,260	2,294	2,294	3,260	3,260	2,294	2,777
6012	M	1,343	1,343	1,343	1,343	1,343	1,343	1,343	1,343
6013	I	7,162	7,162	4,654	4,654	8,953	8,953	4,654	5,908
6014	I	1,270	1,270	1,084	1,084	3,405	3,405	1,084	1,177
6015	I	10,705	10,705	4,471	4,471	13,381	13,381	4,471	7,588
6022	I	180	180	139	139	225	225	139	160
6023*	C	13,601	13,601	5,783	5,783	13,601	13,601	5,783	9,692
6024*	C	4,733	4,733	1,050	1,050	4,733	4,733	1,050	2,892
6044	C	921	921	921	921	921	921	921	921
6045	C	291	291	291	291	291	291	291	291
6087	C	122	122	96	96	122	122	96	109
6088	C	58	58	58	58	58	58	58	58
6089	C	167	167	167	167	167	167	167	167
6090	C	48	48	48	48	48	48	48	48
6091	C	14	14	14	14	14	14	14	14
6092	C	50	50	50	50	50	50	50	50
6093	C	72	72	72	72	72	72	72	72
6094	C	371	371	371	371	371	371	371	371
6095	C	259	259	259	259	259	259	259	259

TABLE 3-2: ESTIMATED SHORT- AND LONG-TERM AUMS FOR ALLOTMENTS BY ALTERNATIVE

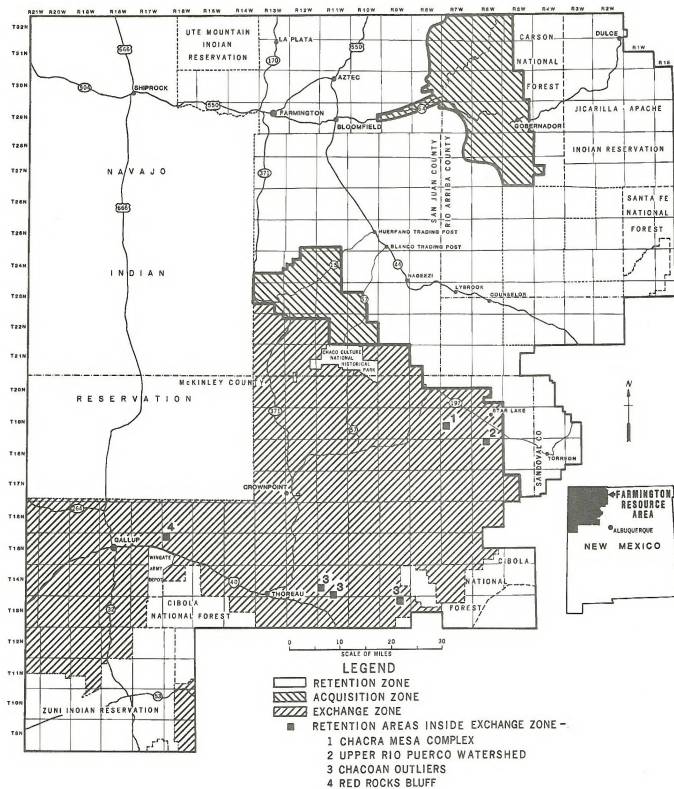
Allotment Number	Management Category	Alternative A		Alternative B		Alternative C		Alternative D	
		Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term
6096	C	60	60	56	56	60	60	56	58
6097	C	24	24	24	24	24	24	24	24
6098	C	36	36	27	27	36	36	27	32
6099	C	17	17	17	17	17	17	17	17
6100	C	70	70	70	70	70	70	70	70
6101	C	72	72	71	71	72	72	71	72
6102	C	85	85	66	66	85	85	66	76
6103	C	24	24	24	24	24	24	24	24
6104	C	4	4	4	4	4	4	4	4
6105	C	108	108	108	108	108	108	108	108
6106	C	307	307	307	307	307	307	307	307
6107	C	216	216	187	187	216	216	187	202
6108	C	36	36	21	21	36	36	21	29
6109	C	38	38	38	38	38	38	38	38
6110	C	36	36	20	20	36	36	20	28
6111	C	108	108	108	108	108	108	108	108
6112	C	108	108	108	108	108	108	108	108
6113	C	108	108	108	108	108	108	108	108
6114	C	182	182	179	179	182	182	179	181
6115	C	40	40	40	40	40	40	40	40
6116	C	36	36	27	27	36	36	27	32
6117	C	78	78	78	78	78	78	78	78

*Allotment administered under a Memorandum of Understanding (MOU) between the BLM, BIA and the Navajo Tribe.

TABLE 3-3: SUMMARY OF ESTIMATED CHANGES IN AUMS BY ALTERNATIVE

	ALTERNATIVE A No Action	ALTERNATIVE B Resource Conservation	ALTERNATIVE C Resource Production	ALTERNATIVE D Preferred
Short-Term AUMs Available	59,673	33,851	67,451	33,851
Net Change From Current Use	0	- 25,822	+ 7,778	- 25,822
Allotments Receiving Adjustments	0	22	5	21
Long-Term AUMs Available	59,673	33,851	67,451	46,768
Net Change From Current Use	0	- 25,822	+ 7,778	- 12,905
Allotments Receiving Adjustments	0	22	5	21

FARMINGTON RESOURCE AREA



MAP 3-1
LAND OWNERSHIP ADJUSTMENTS
ALTERNATIVE B

TABLE 3-4:
EXCHANGE ACREAGES BY ALTERNATIVE

	<u>ALT.A</u>	<u>ALT.B</u>	<u>ALT.C</u>	<u>ALT.D</u>
McKinley	72,103	95,545	142,695	131,655
Rio Arriba	0	0	22,225	22,225
Sandoval	0	0	85,275	73,275
San Juan	1,120	3,400	146,387	97,787
TOTAL	73,223	98,945	396,582	324,942
Total Sq. Miles	114	155	620	508
	(5%)	(7%)	(26%)	(22%)

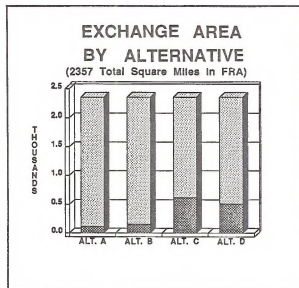


FIGURE 3-1

In the retention zone all federal lands may be consolidated through exchanges with the state of New Mexico, or for private lands as long as there is no major net reduction of federal land. Land ownership adjustments of federal lands within the retention zone will be allowed through R&PP patents if justified. Land sales within the retention zone would be allowed only for parcels listed in Appendix 2.

2. Home Use Fuel Sources: Dead-and-down fuelwood collection would be limited to designated collection areas that do not conflict with planning criteria or the goals of special management areas.

No greenwood fuel cutting areas would be designated. The FRA would continue to manage *two* existing domestic coal licenses, Whiterock and Pueblo Pinedo/Counselor), but no new licenses would be issued.

3. Special Management Areas: Twenty-eight Special Management Areas totaling approximately 409,000 total acres would be identified under this alternative. Appendix B in the draft RMP provides a map, a detailed description and a summary of the management goals and prescriptions for each area.

TABLE 3-5: SPECIAL MANAGEMENT AREAS ALTERNATIVE B

Simon Canyon Recreation Area	Canada Larga Cultural Area
Angel Peak Recreation Area	Betonne Tsoisie
Bisti Wilderness	Beechatuda Tongue River Tracts
De-na-zin Wilderness	Kutz Canyon Paleontological Area
Ah-shi-sle-pah Wilderness Study Area	Torrejon Fossil Fauna ACEC
Farmington Lake Watershed	Fossil Forest Research Natural Area
Carracas Mesa	The Hogback & ACEC
Thomas Canyon	Reese Canyon & ACEC
Negro Canyon	Bald Eagle Wintering Area
Right-of-Way Windows	Aztec Gilia Habitat
Chaco Outliers (9)	Upper Rio Puerco Watershed
Red Rocks Bluff	La Plata Valley Cultural Area
Chacra Mesa Complex	
Nav. Refugee Sites (25)	
Native American Traditional Use & Sacred Areas (5)	

4. Coal Leasing Suitability Assessment: Under this alternative 14 competitive tracts containing 826.6 million tons (429.8 federal) of coal on 57,778 acres (15,861 federal) would be identified as acceptable for further consideration for leasing. These areas with coal development potential have been analyzed using the 20 unsuitability criteria, surface owner consultation data, and a series of multiple use screens. *Refer to Table 3-1 for a list of tracts carried forward under this alternative.*

5. Transportation: Within the Resource Area, SMAs carried forward under this alternative would be "limited" or "closed" to off-the-road vehicular travel as described in their planned actions. Table 3-6 presents a summary of the SMAs which would be

designated as "limited" or "closed." Out of the 1,508,450 acres of public surface within the Resource Area, 315,303 acres would be either "limited" or "closed" to off-the-road vehicular travel.

TABLE 3-6
ORV DESIGNATIONS - ALTERNATIVE B

"Limited"

Portions of Simon Canyon Recreation Area and ACEC

Ah-shi-sle-pah Wilderness Study Area
Carracas Mesa
Thomas Canyon
Negro Canyon
Chacra Mesa Complex
La Plata Valley
Canada Larga
Reese Canyon
Torrejon Fossil Fauna ACEC
Bald Eagle Wintering Area
Aztec Gilla Habitat
River Tracts
Upper Rio Puerco Watershed
Angel Peak Recreation Area
Farmington Lake Watershed
Navajo Refugee Sites
Chaco Outliers Group
Native American Traditional Use and Sacred Areas

"Closed"

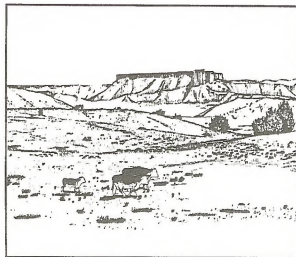
Portions of Simon Canyon Recreation Area and ACEC

Bisti Wilderness
De-na-zin Wilderness
Fossil Forest Research Natural Area
The Hogback
Beechatuda Tongue

All other areas and trails would be designated "open," subject to future emergency closures to protect a sensitive resource or ensure public safety. As for easement acquisition needs, first priority would be given to obtaining legal and/or physical access into SMAs.

6. Vegetative Uses: This alternative would provide for improved ecological condition, enhanced wildlife habitat, and improved protection of watershed resources through reductions in allowable livestock grazing use and improved grazing management. It is estimated that reduction in allowable livestock

grazing use would be proposed for four "I" and 17 "C" allotments, while no reduction would be anticipated for the "M" allotments. Table 3-3 summarizes the estimated short- and long-term adjustments in allowable livestock grazing use which would be proposed under this alternative. Table 3-2 displays estimated short and long-term AUMs by alternative. The actual initial adjustments would be negotiated with currently available vegetative data supplemented by results of five years of monitoring. Changes in grazing management would be implemented to resolve wildlife habitat, watershed, and ecological condition conflicts, or conflicts identified by other conservation-oriented programs. Requests for increases in allowable livestock grazing use would be considered when conservation-oriented needs are satisfied. The grazing MOU with the BIA and the Navajo Tribe would be cancelled for allotments in the retention zone and allotments lying wholly or partially within the wilderness areas. On these allotments the BLM would regain administrative control of day-to-day grazing management activities. The MOU would be continued elsewhere until the public lands are exchanged or disposed of.



7. Right-of-Way Corridors and Windows: Five right-of-way windows, totaling 13,314 acres, would be designated. The location of these windows was determined by the need to reduce resource conflicts. While certain Special Management Areas preclude the location of rights-of-way within their boundaries, the purpose of the windows would be for the placement of right-of-way as the best use within these areas. All right-of-way applications will receive environmental review on a case-by-case basis to minimize resource conflicts.

ALTERNATIVE C: RESOURCE PRODUCTION

• THEME

Alternative C is the Resource Production Alternative, which attempts to resolve the planning issues while placing primary emphasis on making public land and resources available for use and development. The minerals, grazing, ORV, forestry, and similar production-oriented programs are emphasized under this alternative. The goal of this alternative is to change management direction in the FRA so that the seven issues are resolved in a manner that generally places highest priority on the production of resources from the public lands; multiple use management would continue in areas not designated for special management attention.

1. Land Ownership Adjustments: Implementing this alternative could result in the exchange or disposal of approximately 396,500 acres (620 square miles) of public land from federal ownership over the long term, leaving approximately 1,111,900 acres retained under BLM administration. Map 3-2 depicts the retention and exchange zones for this alternative. This map, and the land status map in the back pocket of the *Draft RMP* should be used together to visualize the public land pattern in these zones. With the exception of congressionally legislated and designated SMAs (see Table 3-7) and the coal SMA, all public lands south of the land ownership adjustment line could be utilized to acquire non-BLM lands inside the retention zone, or in acquisition areas identified by other RMPs within the state of New Mexico.

TABLE 3-7: SMAS TO BE RETAINED IN THE EXCHANGE ZONE OF ALTERNATIVE C

Chaco Outliers Group
Bisti Wilderness
De-na-zin Wilderness
Ah-shi-sle-pah Wilderness Study Area*
Fossil Forest Research Natural Area*
Coal Belt
Torrejon Fossil Fauna ACEC

*These two areas would be managed by the BLM until Congress examines their special management status. If that status is removed, the areas would be disposed of. If designated for special management they would be managed accordingly by the BLM.

Inside the retention zone public lands may be consolidated through exchanges with the state of New Mexico, or for private lands, as long as there is no major net reduction of federal land in that zone. Land ownership adjustments of federal lands within the retention zone will be allowed through R&PP patents if justified. Land sales within the retention zone will be allowed only for parcels listed in Appendix 2.

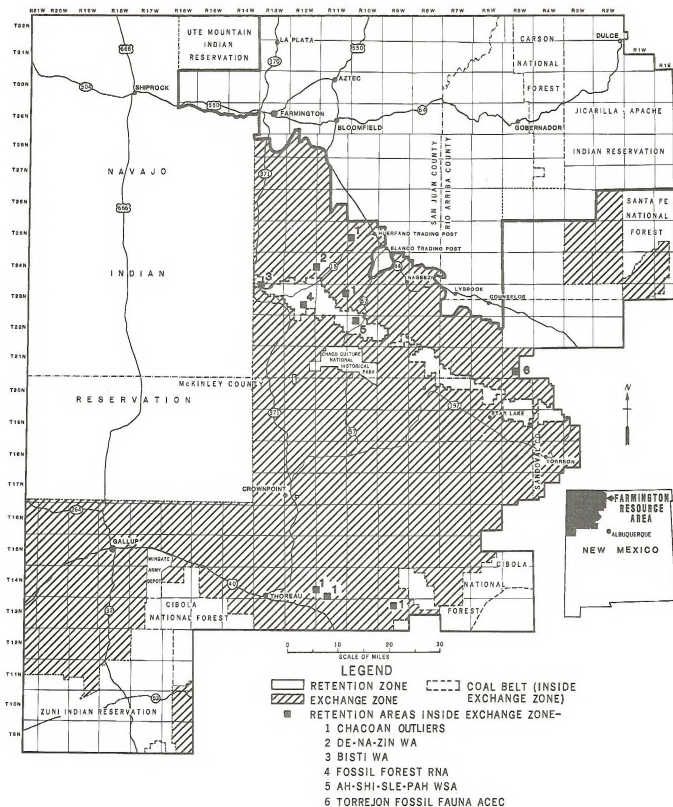
*The collection of
dead-and-down fuelwood and
greenwood would be allowed
Resource Area-wide.*

2. Home Use Fuel Sources: The collection of dead-and-down fuelwood and greenwood would be allowed Resource Area-wide except where resource conflicts or resource degradation would occur. The program would be limited by the planning criterion that cutting cannot exceed sustainable yield. The Bureau would continue to allow the operation of the two existing domestic coal licenses, and would review and process new domestic coal license requests where possible.

3. Special Management Areas: Under this alternative, the Duncs, Head Canyon, Laguna Seca Mesa, the Glade Run Trail System and Coal Belt SMAs would be carried forward. Since the following SMAs have either already been designated through previous land use planning or congressional action, they would also be carried forward under this alternative: the Chaco Outliers, Bisti Wilderness, De-na-zin Wilderness, Torrejon Fossil Fauna ACEC, and Simon Canyon Recreation Area and ACEC. The Ah-shi-sle-pah WSA and the Fossil Forest RNA would retain their special management status until Congress decides if they should continue to be managed as special areas.

4. Coal Leasing Suitability Assessment: Following application of the coal development potential screen, surface owner consultation data, unsuitability criteria and all but one (No. 12) of the multiple use screens, 17 competitive tracts containing 876.6 million tons (478.9 federal) of coal on 60,698 acres (15,861 federal) would be carried forward as acceptable for further consideration for leasing. In an effort to ensure the orderly development of coal resources

FARMINGTON RESOURCE AREA



MAP 3-2
LAND OWNERSHIP ADJUSTMENTS
ALTERNATIVE C

along the Fruitland formation, all public surface within the Coal Belt Special Management Area (77,945 acres) and all public surface within the Chico Wash South tract would be retained under BLM administration. Once coal is developed and the surface is reclaimed on any lease, Preference Right Lease Application or competitive tract, the surface would be available for exchange or disposal. *Refer to Table 3-1 for a list of tracts carried forward under this alternative.*

5. **Transportation:** The entire Resource Area would be designated "open" to off-the-road vehicular travel with the following exceptions: (1) congressionally legislated areas requiring restrictions, (2) lands already designated as "closed" or "limited" on the ORV Designation Register, or (3) areas or trails subjected to future emergency closures. Table 3-8 provides a summary of the SMAs which would be designated as "limited" or "closed."

TABLE 3-8
ORV DESIGNATIONS - ALTERNATIVE C

"Limited"

Portions of Simon Canyon Recreation Area and ACEC
Ah-shi-sle-pah Wilderness Study Area
Chaco Outliers Group
Torrejon Fossil Fauna ACEC

"Closed"

Portions of Simon Canyon Recreation Area and ACEC
Bisti Wilderness
De-na-zin Wilderness
Fossil Forest Research Natural Area
The Hogback

Out of the 1,508,450 acres of public surface within the Resource Area, 42,599 acres would be either "closed" or "limited" to ORV use. Two areas would be designated for specific types of ORV use - one as a general ORV play area, the second as an area for organized competitive events. As for easement acquisition needs, first priority would be given to obtaining legal and/or physical access into SMAs identified under this alternative.

6. **Vegetative Uses:** This alternative would provide for the maximization of forage production for livestock grazing use through an intensive program of grazing management. It is anticipated

that existing levels of vegetative use on "M" and "C" category allotments would be maintained, and that use on "I" category allotments would be maintained or increased. The grazing MOU with the BIA and the Navajo Tribe would be cancelled for allotments in the retention zone and for allotments lying wholly or partially within the wilderness areas. On these allotments the BLM would regain administrative control of day-to-day grazing management activities. The MOU would be continued elsewhere until the public lands are exchanged or disposed of. Range improvement funding for allotments inside the exchange zone would be limited to those projects that can be depreciated before mining and/or disposal occurs.

Existing levels of vegetative use on "M" and "C" categories would be maintained.

Table 3-3 summarizes the estimated shortand long-term adjustments in allowable livestock grazing use proposed under this alternative. Table 3-2 displays estimated shortand long-term AUMs by alternative for the allotments. The determination of AUMs required for short-term reductions and AUMs available for long-term increases in livestock grazing use would be negotiated with currently available vegetative data supplemented by results of five years of monitoring. Changes in grazing management would be implemented to increase forage production and improve ecological condition. No changes in grazing management would be proposed specifically for the purpose of resolving the resource conflicts identified in *the Carson, Kimbeto, Escavada, Counselor or Casaus allotments, but some improvement in these resource conflicts would be anticipated as a result of improved grazing management. Increased forage for wildlife habitat, watershed protection, or other needs identified by conservation-oriented programs would be considered only after livestock grazing use needs were met.*

7. **Right-of-Way Corridors and Windows:** Under this alternative, no right-of-way (ROW) corridors or windows would be designated. Rights-of-way placement would be considered Resource Area-wide except where it would conflict with congressionally legislated decisions to exclude them or with SMAs carried forward under this alternative. Each action will receive environmental review on a case-by-case basis.

ALTERNATIVE D: PREFERRED ALTERNATIVE

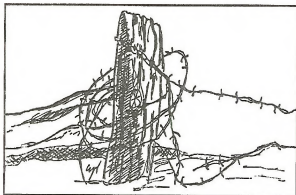
• THEME

The Preferred Alternative for this RMP/ EIS is designed to provide balanced management direction for the FRA. The goal is to resolve the seven issues by providing for a combination of resource uses that would protect important environmental values and sensitive resources while at the same time allow development of resources which provide commercial goods and services. This alternative incorporates concepts proposed in both the resource conservation and resource production alternatives as well as actions intermediate between the two.

One of the main objectives is to improve the land management potential of both state and federal lands.

1. **Land Ownership Adjustments:** Implementing this alternative could result in the exchange or disposal of approximately 324,940 acres (508 square miles) of public lands from federal ownership over the long term, leaving approximately 1,183,500 acres retained under BLM administration. Map 3-3 depicts the retention, exchange, and acquisition zones for this alternative. This map, and the land status map in the back pocket of the *Draft RMP* should be used together to visualize the public land pattern in these zones. With the exception of the special management areas identified under this alternative, all public lands south of the land ownership adjustment line would be available for exchange or disposal. Again, refer to Table 3-1 which displays exchange acreages by alternative and county.

One of the items stated in the Navajo Tribal Code (Title 16, Chapter 1) as policy for the Navajo Tribe is that Indian holdings within the "checkerboard" areas should be consolidated wherever the best interests of the Navajos residing in the area and the Navajo Tribe are served by such consolidation. The Preferred Alternative in the BLM's Resource Management Plan and this Tribal policy are complementary and could be pursued jointly by the Tribe and the BLM.

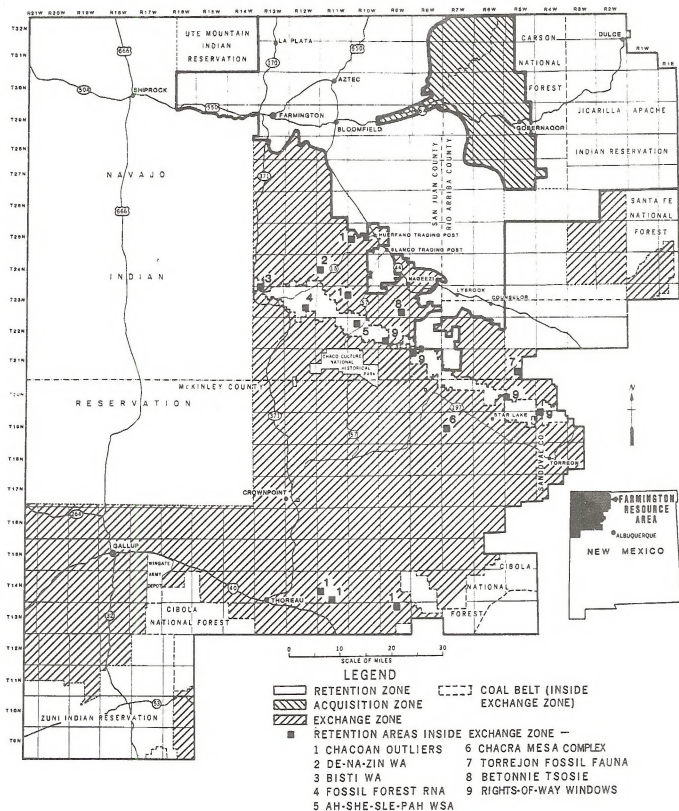


On any land exchange proposal, the Bureau will attempt to acquire non-BLM lands in the public interest. Priority has been set for acquisition areas within the Farmington Resource Area as follows: (1) non-BLM lands (17,963 acres) within SMAs carried forward under this alternative, and non-BLM lands inside the wildlife/range/recreation acquisition zone (101,350 acres), and (2) any non-public lands inside the retention zone. Lands inside the exchange zone could be used to acquire non-public lands inside acquisition areas identified in other RMPs within the state of New Mexico. Land ownership adjustments of federal lands within the retention zone will be allowed through patents which are consistent with multiple-use management objectives for the area. Similarly, land exchanges can occur inside the retention zone as long as there is no major net reduction of federal lands within that zone. Land sales within the retention zone will be allowed only for parcels listed in Appendix 2.

2. **Home Use Fuel Sources:** Dead-and-down fuelwood collection would be allowed Resource Area-wide unless collection conflicts with management goals of SMAs, or resource conflicts and/or degradation would occur. Greenwood cutting would be allowed only for range, forestry, or wildlife habitat improvements, or in areas proposed for surface mining. The existing domestic coal licenses (Whiterock, and Pueblo Pintado/Counselor) would continue to be managed by the BLM. New domestic coal license applications would be considered on a case-by-case basis.

3. **Special Management Areas:** Thirty Special Management Areas totaling 98,383 acres would be identified under this alternative. Table 3-9 displays the names of the SMAs, while Appendix 1 provides a map, a detailed description, and a summary of the management goals and prescriptions for each area.

FARMINGTON RESOURCE AREA



MAP 3-3
LAND OWNERSHIP ADJUSTMENTS
ALTERNATIVE D
3-15-

**TABLE 3-9: SPECIAL MANAGEMENT
AREAS - ALTERNATIVE D**

Chaco Outlier Group (9)
Torrejon Fossil Fauna ACEC
Betonne Tsoie
Chacra Mesa Complex
Dunes *Vehicle Recreation Area*
Native American Traditional Use and Sacred
Areas (4)
Head Canyon ORV Competition Area
Simon Canyon Recreation Area and ACEC
East Side Rincon Site
Angel Peak Recreation Area
Navajo Refugee Sites (25)
Bald Eagle Wintering Area
The Hogback
Bisti Wilderness*
De-na-zin Wilderness*
River Tracts
Coal Belt
Right-of-Way Windows (4)
Beechatauda Tongue
Thomas Canyon
Negro Canyon
Laguna Seca Mesa
Reese Canyon
Kutz Canyon Paleontological Area
Ah-shi-sle-pah Wilderness Study Area**
Fossil Forest Research Natural Area**
Carracas Mesa
Glade Run Trail System
Farmington Lake Watershed
Aztec Gillia ACEC

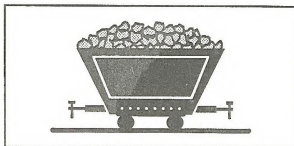
*The actual wilderness areas and any additional
support areas would be retained and managed by the
BLM.

**These two areas would continue to be
managed by the BLM until Congress examines their
special management status. If that status is removed,
the area would be available for exchange or disposal.
If designated by Congress for special management,
they would be managed accordingly by the BLM.

4. Coal Leasing Suitability Assessment:
Under this alternative, 17 competitive tracts contain-
ing 876.6 million tons (478.9 federal) of coal on
60,698 acres (15,861 federal) would be identified as
acceptable for further consideration for leasing. The
areas with coal development potential have been ex-
amined using the 20 unsuitability criteria, surface

owner consultation data, and a series of multiple-use
screens. Refer to Table 3-1 for a list of tracts car-
ried forward under this alternative.

In an effort to ensure the orderly development of
coal resources along the Fruitland Formation, all
public surface within the Coal Belt Special Manage-
ment Area (approximately 77,945 acres) and all
public surface within the Chico Wash South tract
would be retained under BLM administration. Once
coal is developed and the surface is reclaimed on any
lease, Preference Right Lease Application or competi-
tive tract, the surface would be available for ex-
change or disposal.



5. Transportation: The entire Resource Area
would be designated "open" to off-the-road vehicle
travel with the following exceptions: (1) congres-
sionally legislated areas requiring restrictions, (2)
lands already designated as "closed" or "limited" on
the ORV Designation Register, or (3) areas subjected
to future emergency closures. Table 3-10 provides a
summary of the SMAs which would be designated as
"limited" or "closed".

**TABLE 3-10
ORV DESIGNATIONS - ALTERNATIVE D**

"Limited"

Portions of Simon Canyon Recreation Area
Ah-shi-sle-pah WSA
Carracas Mesa
Chacra Mesa Complex
Reese Canyon
Torrejon Fossil Fauna ACEC
Bald Eagle Wintering Area
River Tracts
Angel Peak Recreation Area
Farmington Lake Watershed
Navajo Refugee Sites
Native American Traditional Use and Sacred
Areas
Chaco Outlier Group

TABLE 3-10 (Continued)

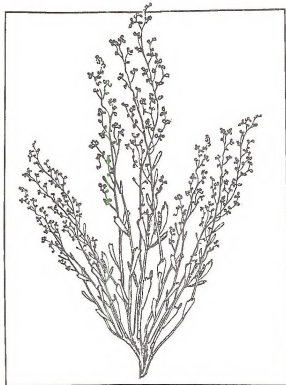
"Closed"

Portions of Simon Canyon Recreation Area and ACEC

Bisti Wilderness
De-na-zin Wilderness
Fossil Forest Research Natural Area
The Hogback
Beechatuda Tongue
East Side Rincon Site
Thomas Canyon
Negro Canyon

Out of the 1,508,450 acres of public surface within the Resource Area, approximately 132,439 acres would be either "closed" or "limited" to off-the-road vehicular travel. As for easement acquisition needs, first priority would be given to obtaining legal and/or physical access into SMAs identified in this alternative. Other easement needs would be addressed on a case-by-case basis.

6. **Vegetative Uses:** This alternative would provide for a balance of resource uses through a program of improved grazing management. Future changes in management would be developed in



cooperation with all Resource Area specialists to resolve the resource conflicts identified in the *Carson, Kimbeto, Escavada, Counselor and Casaus Allotments*. It is anticipated that existing levels of vegetative use on "M" category grazing allotments would be maintained and levels adjusted to protect existing resource values on "C" category allotments. Necessary actions on "I" category allotments would be taken to attain "M" category status for those allotments. The grazing MOU with the BIA and the Navajo Tribe would be cancelled for allotments in the retention zone, and allotments lying wholly or partially within the wilderness areas. On these allotments the BLM would regain administrative control of day-to-day grazing management activities. The MOU would be continued and possibly expanded elsewhere until the public lands are exchanged or disposed of. Range improvement funding for allotments south of the retention zone would be limited to those projects that can be depreciated before mining and/or exchange or disposal of the public lands.

Estimates of the short- and long-term adjustments in allowable livestock grazing use to be proposed under this alternative are displayed in Table 3-3. The actual short- and long-term adjustments implemented would be based on a five-year program of vegetative monitoring studies. Table 3-2 displays estimated shortand long-term AUMs by alternative.

7. **Right-of-Way Corridors and Windows:** Four of the five right-of-way windows designated under Alternative B would be carried forward. The Bisti Bypass Window, containing 714 acres, was removed from this alternative based on conflicts associated with acreage selected by the Navajo Tribe under the Navajo/Hopi Relocation Settlement Act. The remaining windows would be managed to promote the placement of rights-of-way as the best use within those areas. Conversely, some of the Special Management Areas have management actions which would preclude the location of rights-of-way within their boundaries. Those SMAs represent rights-of-way exclusion areas. A right-of-way can be approved across public surface within the coal SMA, however, stipulations would be placed in the right-of-way grant which would require the grantee to bear the expense of relocating the facility if coal is leased and mining operations occur.

The remainder of the Resource Area would be open to the location of rights-of-way on a case-by-case basis with normal environmental review.

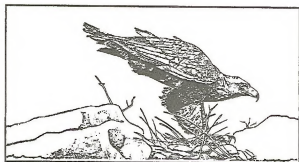
Affected Environment

INTRODUCTION

This section describes those physical, biological, social, and economic characteristics of the Farmington Resource Area which affect or are affected by the resolution of the seven issues. Much of the information in this chapter summarizes more detailed material contained in the Farmington Resource Area Management Situation Analysis (MSA), available for review at the Farmington Resource Area Office. The Existing Management Situation and the Resource Area Profile sections of the MSA are in-depth discussions of the environment in the Farmington Resource Area.

TOPOGRAPHY

Elevations in the Farmington resource planning area range from approximately 4800 feet where the San Juan River leaves New Mexico to approximately 9400 feet in the Chuska Mountains near Washington Pass and 8800 feet along the eastern boundary of the Jicarilla Reservation. Elevations in the Resource Area on surface managed by the BLM range from 5000 feet near Waterflow to 8200 feet near Ambrosia Lake, N.M. Topographic expression is varied, ranging from perhaps 50 to 100 feet per mile over most of the Area and exceeding 1000 feet per mile along steep canyons and mesas, mountain ranges, and such points of interest as Shiprock, Angel Peak, and Hogback. These extreme changes in topography, as well as smaller, more localized examples such as the Bisti Wilderness, provide most of the unusual scenery within the Resource Area.



Extreme topographic relief imposes limitations on certain activities. Steep cliffs may act as natural "fences" for livestock; grazing allotment boundaries often reflect this fact. Again certain rights-of-way, such as roads, must follow longer routes rather than contend with extreme grades and/or costly earthwork involved in a more direct route. Development of other resources may also be impeded.

CLIMATE

The Farmington Resource Area has an arid to semi-arid continental climate with varied temperatures. Summer daytime temperatures are usually 80 to 95 degrees F., sometimes rising to about 100 degrees F. Winter daytime temperatures are usually 20 to 30 degrees F. with occasional below zero degrees F. temperatures. Generally, May through September is frost-free.

The major periods of precipitation occur from July through September in the form of thunderstorms which are scattered and localized in occurrence and are of variable intensity. The annual average precipitation rate for most of the Resource Area is below 10 inches. Most of the precipitation occurs in higher elevations. Flash flooding is common during and after heavy thunderstorms.

Prevailing winds are normally 5 to 15 miles per hour. High-intensity winds occur during March and April with recorded speeds of 50 to 60 miles per hour. Terrain plays an important role in determining surface wind direction and speed.

MINERALS

The Farmington Resource Area is situated almost entirely within the San Juan structural basin. With few exceptions, notably the Mount Taylor volcanic field in southeastern McKinley County and volcanic necks such as Shiprock, the rocks underlying the Area are sedimentary. Regional geology is summarized in the San Juan Planning Unit Resource Analysis, Step 2 (USDI, BLM 1979a).

• MINERAL RESOURCES

There are five mineral activities within the Farmington Resource Area (FRA) that require continuous management. These consist of a large oil and gas program; a coal program; sales of common variety materials (i.e. sand and gravel, fill, red dog, etc.); locatable minerals; and inspection and enforcement responsibilities for all minerals on Indian lands. These programs will remain a continuing high priority responsibility for the Resource Area.

• OIL AND GAS

The Farmington BLM administers Federal and Indian oil and gas leases in an Juan, Rio Arriba, and McKinley Counties in New Mexico, as well as leases in Utah and Arizona which are within the Navajo Reservation. As of October 1986 there were 2,228 producing federal oil and gas leases in the Resource Area on approximately 1.625 million acres and 2,849 non-producing federal leases on 3.482 million acres. In addition, there were 557 producing Indian leases on .56 million acres and 285 non-producing Indian leases on .29 million acres in New Mexico, Arizona, and Utah. Approximately 750 applications for permit to drill (APDs) were received in fiscal year 1985.

*As of October 1986 there were
2,228 producing federal oil and
gas leases in the FRA*

Almost 20,000 oil and gas wells are administered by the Resource Area. The FRA is responsible for processing APDs; pre-drill inspection of proposed drill sites; cultural and threatened or endangered species clearances; compliance inspection and enforcement for lease terms and conditions, safety, production verification and site maintenance; and abandonment inspections of drilling locations. Drilling proposals are reviewed for spacing and unit or communitization recommendations. Records are maintained for all leases for which the FRA has responsibility. They are continually updated to show status (active, inactive, producing, non-producing, etc.), changes in operators, assignments of lease rights and so on.

Oil and gas production is from 99 designated oil pools, 92 designated gas pools, 7 associated pools,

and a number of undesignated (wildcat) wells. Petroleum is produced from rock layers ranging in age from 60 to 300 million years old (Tertiary to Pennsylvania systems). However, Cretaceous rocks 65 to 130 million years old account for the overwhelming majority (approximately 99 percent) of production.

Average monthly production of oil amounts to 506,421 bbl/mo (barrels per month) from federal leases and 150,422 bbl/mo from Indian leases. Monthly gas production averages 32,823,987 mcf/mo (thousand cubic feet per month) from federal leases and 3,613,787 mcf/mo from Indian leases.

Known Geologic Structure (KGS) determinations and establishment of units and communitization agreements within the FRA are done by the District Office.

• COAL

The Resource Area contains more than 170 billion tons (*7.5 billion tons are potentially strippable*) of Cretaceous coals concentrated in three major stratigraphic intervals: the Fruitland Formation; the Mesaverde Group, which contains the upper and lower Menefee Formation coals; and the Crevasse Canyon Formation, which contains the Dilco and Gibson coal members. The Fruitland Formation, largest of the three, contains 3.8 billion tons of potentially strippable coal (annual resources report, N.M. State Energy and Minerals Dept. 1986). Heating value ranges between 8,000 and 12,000 BTU/lb. as received in the *Mesaverde and Crevasse Canyon* coals, somewhat less in the *Fruitland*. Ash content is lower in the southern coals, ranging from 5 to 15 percent, compared to 10% to 35% ash in the northern coals. Sulfur is low in all San Juan Basin coals, ranging from about .3 to 1.5 percent and averaging .6 to .7 percent.

There are presently 21 coal leases in the Resource Area which are administered by BLM. Three are Indian leases on the Navajo Reservation, and the rest are on federal or split estate surface.

Three large mines - San Juan, Navajo, and McKinley - produced approximately 19 million tons of coal in 1986. The Burnham Mine is essentially in a standby status for lack of a market. In contrast, the La Plata Mine and Sunbelt's De-na-zin leases began producing *recently*. The future of the remaining leases is less certain, although two old inactive underground mines may be abandoned in the near future.

In addition, an exchange of federal and private coal near the Lee Ranch Mine *was recently* completed.

In addition to coal leases, there are currently 26 Preference Right Lease Applications (PRLAs) in the area. These PRLAs must eventually be processed and the applications approved or denied according to criteria established by the Mineral Leasing Act of 1920, as amended. If approved, the areas will become leases, except in wilderness areas.

Thirty-nine competitive coal leasing tracts have been delineated within the area. These tracts are discussed in the San Juan River Regional Coal EIS (USDI, BLM 1984a).

Navajo allottees in the area have historically used coal from surface exposures as fuel for cooking and heating during the winter. There are now *two* domestic-use mining licenses in the area and more pending.

The La Plata Mine began production in Fiscal Year (FY) 86 and will average 1.5 million tons per year. With La Plata Mine production and production from the Burnham Mine, if it locates a market, cumulative production from all mines will continue to grow to more than 20 million tons per year.

The FRA is responsible for inspection and enforcement on all coal leases to ensure compliance with lease terms and conditions and stipulations on exploration. In addition to surface protection, inspections are intended to ensure maximum economic recovery (MER) and conformance of the operation with an approved mining or exploration plan. Finally, the FRA is responsible for product verification, i.e. independently auditing mine production reports to ensure fair royalty reporting to the federal government and the Navajo Tribe.

• SALEABLE MINERALS

Saleable minerals include such common variety materials as sand and gravel, rock and stone, and fill material. At present, there are 28 active sand and gravel and fill contracts and two scoria contracts. Five more pits are pending. In FY 86, 23 sales were issued for 706,000 cubic yards of material, valued at \$181,000. Also, 17 free use permits were issued for 1,487,000 cubic yards of material. Usually, free use permits account for about 90 percent of materials production in any given year. This level of use will probably continue or increase in the future. The

resolution of several outstanding trespass cases may result in issuance of more contracts in the future.

A more complete assessment of activity and potential for all minerals is available in the Farmington Resource Area Mineral Resource Inventory.

Although BLM has oversight responsibility for all Indian minerals operations, the tribes have not informed the FRA of common variety material (e.g. sand and gravel) operations. Hence, the BLM has no record of such operations and no workload from that source.

• LOCATABLE MINERALS

The primary locatable mineral in the Resource Area is uranium, which is found in the southern portion of the area (Grants uranium region) around Ambrosia Lake and Church Rock in the Jurassic Morrison Formation and associated rocks. A few claims have been staked in the northern part of the Resource Area for gold and sand and gravel (pre-1955 claims) but these claims have little, if any, impact on this program.

The Grants uranium region has produced more uranium than any other area in the world. At present, more than 40 percent of domestic reserves in the \$50/lb. and under category are found there. The 1980s have been a period of steady decline in uranium demand and all but one mine has ceased operation; however, there are a number of active in-situ leach operations. This steady decline is due to several factors, the two most damaging being stiff competition from foreign uranium fields and a virtual cessation in new nuclear power plant construction in this country. Current stockpiles of processed ore are adequate to satisfy existing contracts for the foreseeable future.

The Resource Area's responsibility in this program consists of completing validity examinations for patent applications or Bureau actions and review and inspection of notices of *intent to conduct operations* and plans of *operations* filed under the 43 CFR 3809 regulations for surface protection. The current workload from this program is small, although some validity examinations may be needed from time to time for Bureau actions such as surface conveyance in sales or exchanges. Although the uranium industry is depressed, companies continue to file annual assessment work and maintain mining claims in good standing.

VEGETATION

Vegetation in the Farmington Resource Area is classified within four Major Land Resource Areas (MLRAs) as described by the United States Department of Agriculture Soil Conservation Service (1982). The four MRLAs are the New Mexico and Arizona Plateaus and Mesas, the San Juan River Valley Mesas and Plateaus, the Arizona and New Mexico Mountains, and the Southern Rocky Mountains. The majority of the Farmington Resource Area is located within the New Mexico and Arizona Plateaus and Mesas and the San Juan River Valley Mesas and Plateaus MLRAs.

Vegetation in the Farmington Resource Area is classified within four Major Land Resource Areas (MRLAs).

The New Mexico and Arizona Plateaus and Mesas MLRA is located in the eastern and southern portions of the Farmington Resource Area. In the eastern portion this MLRA is characterized by canyons and mesas. The canyons are dominated by greasewood (chico) and big sagebrush with western wheatgrass, galleta, bottlebrush squirreltail, Indian ricegrass, blue grama, and alkali sacaton understory. The rocky side slopes are characteristically covered by one-seed juniper, piñon pine, and other shrubs with very little herbaceous understory. The mesas contain mostly big sagebrush with blue grama, galleta, and bottlebrush squirreltail understory.

The southern portion of the New Mexico and Arizona Plateaus and Mesas MLRA is primarily grassland. The major grasses are blue grama, galleta, and drop-seeds. Broom snakeweed occurs in varying amounts in most areas. One-seed juniper is scattered on the ridges and rocky areas.

The San Juan River Valley, Mesas and Plateaus MLRA is located in the center of the FRA. Big sagebrush dominates the eastern portion of this MLRA. Understory species are blue grama, galleta, and Indian ricegrass. The western portion of this MLRA is grassland dominated by blue grama, galleta, Indian ricegrass, and dropseeds. Associated shrubs include snakeweed and four-wing saltbush.

The other two MLRAs, the Arizona and New Mexico Mountains and the Southern Rocky Mountains, occur on small areas of the Farmington Resource Area. These MLRAs are primarily transitional areas to the MLRAs discussed above.

LIVESTOCK GRAZING

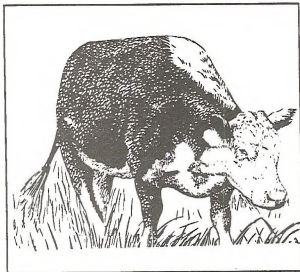
• OPERATIONS

There are 375 individual livestock operators licensed to graze livestock on 246 allotments within the Farmington Resource Area. Of the 246 allotments, 146 are administered under Section 3 of the Taylor Grazing Act and 100 are administered under Section 15 of the Act, with 316 and 59 individual operators, respectively. These figures include two leases which comprise the allotments covered by the Memorandum of Understanding between the BLM, BIA, and the Navajo Tribe. Leases for individual users are issued by the BIA.

Most allotments contain a combination of public, private, and state-leased land. The private and state-leased lands are grazed in conjunction with the public lands.

• PERIOD OF USE

The period of livestock use on these allotments varies from seasonal to yearlong. The majority of seasonal allotments are in the northern half of the FRA, while yearlong allotments dominate the southern half.



Most of the seasonal operators graze livestock on public lands from November until May and move to summer pasture in Colorado, primarily on the San Juan National Forest. A few of the seasonal-use operators graze public lands in the summer and move to private irrigated lands in the winter to graze crop residue.

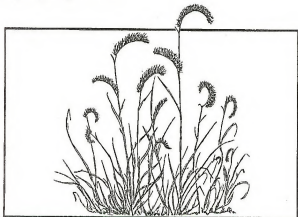
KIND OF LIVESTOCK AND TYPE OF OPERATION

Cattle, horses, sheep, and goats are authorized to graze public lands in the Farmington Resource Area. The majority of ranchers have a cow-calf operation, with calves usually shipped in October and November. Some replacement heifers are normally held. Depending on market conditions, some cow-calf operators may hold the calves over the winter and market them as yearlings. The herd size for cow-calf operations varies from approximately 1,000 on the largest allotment to four on the smallest. Horses are permitted and used primarily in support of the cow-calf ranch operations.

There are six commercial sheepoperators in the Area. Flock size ranges from the largest of 2,200 to the smallest of 200. Approximately 185 Navajos graze sheep and goats on a free use basis with flocks of 100 animals or less, in accordance with a Special Rule approved by the Secretary of the Interior on April 15, 1954.

FORAGE DEMAND

The demand for forage on the public lands in the Farmington Resource Area has remained stable for the past 15 years and is expected to continue in the future. The smaller operators, with less than 100 cattle, are gradually leaving the business. Most of the smaller operations are being consolidated into existing larger operations.



PROBLEM AREAS

Major problems affecting livestock grazing and management in the Farmington Resource Area are ranked in order of importance as follows:

1. Excessive utilization of key forage species.
2. Scattered land ownership patterns, mainly in the southern half of the Resource Area.
3. Energy development.
4. Maintenance of range improvements.
5. Unauthorized livestock.
6. Improper season of use.
7. Distribution of livestock.

INVENTORIES

A rangeland inventory of 926,909 acres was completed in 1978 for the area covered by the San Juan Grazing Management Environmental Impact Statement (USDI, BLM 1980). This inventory provided data on species composition, production, cover, range condition by vegetative type, existing range improvements, and suitability for livestock grazing.

The data from the San Juan Grazing Management Environmental Impact Statement (EIS) inventory were compiled and analyzed. The final EIS was published in 1980. Information on 138 Section 3 allotments can be found in that document.

A rangeland inventory of approximately 468,000 acres was initiated in 1984 for the public lands not included in the San Juan Grazing Management EIS. This inventory provides data on range sites, condition, production, and apparent trend for six Section 3 allotments and 41 Section 15 allotments.

The inventory plan adopted for this effort included inventory on about 206,000 acres of Section 3 public lands and approximately 262,000 acres of Section 15 public lands. Section 15 allotments that included isolated, small tracts of public lands were not inventoried because of funding limitations and because the possibility of changes in allotment categorization is negligible.

LANDS

The Farmington Resource Area administers 1,508,450 acres of public surface estate. These lands are fairly well consolidated in San Juan County, the western part of Rio Arriba County, and northwestern

Sandoval County. In McKinley County and in the Lindrith area of Rio Arriba County, the public lands are scattered and intermingled with a variety of other ownerships.

Forest Service lands within the planning area boundary are located in the northwest corner of Rio Arriba County and along the southern boundary of McKinley County. The lands in Rio Arriba County consist of the extreme northwest corner of the Santa Fe National Forest and the western portion of the Carson National Forest, known as the Jicarilla Ranger District. In McKinley County the lands are part of the Cibola National Forest. There are a number of small consolidated parcels of state lands in the coal-rich central region of the Resource Area. Throughout the rest of the Resource Area, state lands consist of isolated sections and smaller tracts. Private ownership is concentrated in the Lindrith area and along the San Juan, La Plata, and Animas River valleys. The largest blocks of private lands in the southern portion of the Resource Area lie in the eastern one-third of McKinley County. Other concentrations occur around the city of Gallup and in south-central McKinley County in the Thoreau area along Interstate Highway 40.

The close proximity of public lands to population centers creates an active lands program for the Farmington Resource Area.

Approximately 75 percent of the Zuni Reservation, all of the Jicarilla Reservation, a small portion of the Ute Mountain Reservation, and approximately 80 percent of the Navajo Reservation within the state of New Mexico are within the planning area. Off-reservation Navajo lands include those that are under the administration of the Bureau of Indian Affairs, Eastern Navajo Agency, most of which are in the southern portion of the Resource Area. The majority of these lands are individual Indian allotments, tribal trust lands, and lands withdrawn for Indian use by Executive Order 1483 and Public Land Order 2198.

Major urban areas in the northern portion of the FRA are Farmington, Aztec, and Bloomfield. Their approximate current populations are 37,000, 6,000, and 6,000 respectively. Located in the San Juan and

Animas River valleys, they are interconnected by suburban and industrial areas. Gallup's population of about 20,000 makes it the principal urban area in the southern part of the Resource Area. Other commercial areas include Crownpoint and the 13 trading posts scattered throughout the region. They provide limited trade centers for the Navajo population living in their respective areas. Associated with the trading posts may be a post office, mission, school, homes, and in the case of Lybrook, an industrial site.

The close proximity of public lands to these population centers creates an active lands program for the Resource Area. There is a large demand for rights-of-way with priority on access, utility and telephone lines, and communication sites. There have also been a number of Recreation and Public Purposes (R&PPP) leases and patents issued. The most common requests in this category have been for schools, churches, sanitary landfills, and recreation areas. This type of case work, plus an increasing request for land sales, will continue to grow as more land around the communities is developed.

Since 1950, oil and gas production and transmission has been the largest industry in the region. Concentrated in western Rio Arriba and San Juan counties, energy-related rights-of-way have historically been the major workload in the Farmington Resource Area's lands program.

Coal mining and the associated production of electrical power have created a need for high voltage powerline rights-of-way. If coal gasification becomes a reality, rights-of-way for large gas transmission lines will also be needed.

Paralleling the development of these industries has been the establishment of de facto right-of-way corridors. These corridors have been established by the placement of numerous transmission lines in the same areas as a result of various constraints. These constraints include topographic features, land status, and mineral conflicts.



FORESTRY

Approximately 600,000 acres of public lands in the Resource Area are dominated by a forest type known as "woodlands." This term is used to describe a piñon pine/juniper climax species type normally found growing together. Depending upon the elevation, aspect, soils, and the availability of water, the dominant species can vary. Usually, the juniper will be more numerous on the more arid and lower sites and on southern aspects. The piñon require more water to survive than the juniper and are usually outnumbered except on the north-facing slopes and the higher, cooler elevations with better soil. Woodlands are found scattered throughout the eastern and southeastern portion of the Resource Area. This type clings to the edges of the sandstone mesas and the steep slopes. Normally, the woodlands consist of an overstory of older trees with an understory of grass, brush, and younger trees. Browse and grass production is greater when the woodlands are young; as the stand matures, shading increases and limits understory production.

Woodlands are scattered throughout the eastern and southeastern portions of the Farmington Resource Area.

Many acres of woodland are not suitable for forestry management. Some of these are piñon-juniper encroachment areas brought on by overgrazing or climatic factors. By eliminating the areas where topography is not favorable (more than 35 percent slope) and areas of poor soil or site, the remaining manageable area is less than 50 percent of the total. At this time about 45 percent of the total woodlands is capable of being managed on a sustained yield basis.

Isolated pockets of ponderosa pine, Douglas fir, aspen, cottonwood, and willow are found at the heads of many rocky canyons and north slopes within the woodland type. Cooler, wetter, and more protected sites are needed to support these larger conifers and deciduous trees. Other sub-types occur throughout the eastern half of the Farmington Resource Area. Among these are the Piñon-Ponderosa-Oakbrush type usually found at the higher elevations. Oakbrush is

the predominant understory occupying the small parks beneath the overstory of ponderosa pine. Another type, with limited range, is the Ponderosa Pine/Douglas Fir type. It is a mixture of pine and fir with an understory of oakbrush. This type comprises a small area along the southern border of the Resource Area and is also found in the Lindrih area.

There are approximately 7,400 acres of predominantly ponderosa pine types in the Resource Area, nearly all of which could be managed successfully for timber production. Steep topography is the primary factor limiting management. Timber harvesting technology has advanced to a degree that areas previously not economically feasible to harvest are now considered to be harvestable (refer to Table 34B-1, Chaco URA Step 2, page V and Table V-1, 34 Vegetation - Major Vegetation Types, San Juan Planning Unit USDA, BLM 1979a).

The present woodland uses consist of harvesting for fuelwood, fence posts, Christmas trees, and wildings. At least 50 percent of the Resource Area is open to these sales.

The woodlands were inventoried during the 1986 field season by the Intermountain Research Station at Ogden, Utah. The inventory was done in cooperation with the U.S. Forest Service, M State Division of Forestry and other agencies. Its purpose was to obtain a reliable inventory of the woodland and forest resources. Other inventories have been completed in the past on the commercial forests of New Mexico, but this is the first directed specifically toward woodland resources. When information from this inventory is analyzed and a report becomes available, more realistic woodland and forest activity plans can be prepared.

SOILS

Published soil survey information is available for part of the Farmington Resource Area. Most of McKinley County is not covered by a published soil survey, however, a survey is currently being prepared. The most recent inventory of erosion problems in the FRA was a study of sediment yields in the San Juan Planning Unit (Earth Environmental Consultants, Inc. 1978).

A 1974 Phase I Watershed Conservation and Development Inventory rated soil surface conditions

by watershed. Scattered tracts in McKinley County were not included. The inventory was intended to identify watershed needs and suitable treatments. No effort has been made to update either inventory or expand coverage to the entire Farmington Resource Area. The 1972 evaluation of the Rio Puerco Project influenced nearly all watershed stabilization projects in the state. This evaluation emphasized grazing management in place of watershed stabilization projects to control erosion.

The best sources of information on existing or potential salinity problem areas are the soil surveys. However, complete, modern coverage is not yet available for the entire Farmington Resource Area.



HYDROLOGY

Portions of the Farmington Resource Area lie within three regional hydrologic systems. The largest area is within the San Juan River sub-basin of the Upper Colorado River Hydrologic Region, followed by the Middle Rio Grande sub-basin of the Rio Grande Hydrologic Region, and the Little Colorado River sub-basin of the Lower Colorado Hydrologic Region.

The San Juan River drainage heads on the Continental Divide north of Pagosa Springs, Colorado, and flows generally westward through the FRA. A number of perennial tributaries to the San Juan River in New Mexico rise in southern Colorado. The major tributaries include the Animas and La Plata Rivers. The major tributaries that rise in the southern portion of the San Juan Basin include Canyon Largo, Gallegos Canyon, and the Chaco River; all are ephemeral streams.

The southeastern portion of the Farmington Resource Area is drained by tributaries to the Rio Puerco River, which flows to the Rio Grande River. The two major stream systems draining southeast from the Continental Divide are Arroyo Chico and Rio San Jose. Both are ephemeral streams.

The Puerco River (different from the Rio Puerco) is an ephemeral stream which heads on the Continental Divide just north of Hosta Butte and drains southwest into the Little Colorado River at Holbrook, Arizona.

• SURFACE WATER QUANTITY

The San Juan, Animas, and La Plata Rivers are the only perennial streams in the Farmington Resource Area. Most of the stream gages within the FRA are concentrated along these perennial streams with very little information being gathered on small, ephemeral streams in the southern half of the Resource Area. Location of gaging stations and a summary of recorded discharges are available in the Management Situation Analysis, Hydrology Profile.

Streamflow in ephemeral channels is only in response to storm events. Differences in rainfall patterns cause streamflow to be extremely variable. Approximately one-half of the annual precipitation occurs from July through October, generally in the form of localized, short-duration, high-intensity thunderstorms. These storms may create large flows, which are commonly of limited duration and extent.

The kind of soil and amount and type of vegetation have a major effect on the amount of precipitation that becomes surface runoff. Studies in New Mexico found that storm and annual runoff varied with the amount of bare soil or the amount of vegetation plus mulch (Branson et al. 1978). Surface runoff increased as vegetation and litter decreased. With an increase in runoff there are higher velocities that initiate more erosion, and more water that transports sediment and chemical pollutants off-site (EPA-BLM, 1979).

Within the Resource Area, 27 percent of the area covered by the San Juan Grazing Management EIS is in poor ecological condition, while in the Chaco Grazing EIS Area 14 percent is in poor condition. These areas correspondingly have sparse vegetative cover and contribute high runoff rates to the ephemeral channels.

• SURFACE WATER QUALITY

Availability of water quality data, like stream-flow data, is largely limited to the perennial streams in the northern part of the Resource Area. The water quality of the perennial streams varies from upstream to downstream and is strongly influenced by the type of rock and soils with which the water has been in contact. In their upper reaches, the perennial streams have relatively low concentrations of dissolved solids. In their middle and lower reaches, the streams contain progressively more magnesium, calcium, sodium, and sulfate concentrations. Water quality also varies according to flow conditions. Generally there are higher concentrations of ions at lower streamflows.

Ephemeral flows are generally very poor quality water due to the highly erosive and saline soils, sparse vegetation, and rapid runoff conditions.

Quality data for the ephemeral runoff south of the San Juan River are limited to only a few observations at sampling stations associated with the USGS coal hydrology program. Ephemeral flows are generally very poor quality water due to the highly erosive and saline soils, sparse vegetative cover, and rapid runoff conditions that are characteristic of the area. Surface runoff in the area usually contains greater than 10,000 mg/l (milligrams per liter) of suspended sediment and greater than 1,000 mg/l of dissolved solids.

Salinity control is a significant issue in the Colorado River Basin. Available data on salinity contribution from the Farmington Resource Area are limited, however, existing information from the La Plata and Chaco Rivers does provide evidence that moderately saline water (1,000 to 2,000 mg/l dissolved solids) is predominant within these basins.

• GROUND WATER RESOURCES

The Farmington Resource Area coincides approximately with the San Juan Structural Basin as defined by Kelly (1951). This basin is larger than either the San Juan River Basin or the San Juan Underground Water Basin declared by the New Mexico State Engineer.

Natural discharge of ground water from San Juan Structural Basin aquifers generally occurs as the water moves toward the Four Corners region and the Rio Grande Valley. Some ground water moves southwest toward the Puerco River near Gallup.

• GROUND WATER QUANTITY

Ground water is available nearly everywhere in the San Juan Basin. Although many aquifers are known to yield water to wells somewhere in the basin, most yields are low (less than 20 gallons per minute - gpm). The better aquifers are found in sandstone units of Jurassic, Cretaceous, and Tertiary age. Quaternary alluvium deposits filling stream channels are also capable of yielding sufficient quantities of water for local use.

Seven aquifers have demonstrated 100 gpm potential for properly constructed wells. These include the San Andreas-Glorieta system, the Entrada Sandstone, the Morrison Formation, the Gallup Sandstone, the Ojo Alamo Sandstone, the Nacimiento Formation, and the San Jose Formation.

• GROUND WATER QUALITY

The quality of ground water in the San Juan Basin generally ranges from fair to poor. In most places the dissolved solids content exceeds 1,000 mg/l. The water is hard to very hard with actual chemical composition depending on location of withdrawal and the producing aquifer. Calcium or sodium is usually the predominant cation, and bicarbonate or sulfate the predominant anion.

Generally, water from the alluvium is of better quality than that from adjacent bedrock aquifers because the recharge comes more directly from precipitation and usually has not been in contact with soluble minerals for very long. Where bedrock aquifers discharge to the alluvium, dissolved solid concentrations in alluvium will increase. More detailed information on ground water quality can be found in the FRA Management Situation Analysis Hydrology Profile.

AIR QUALITY

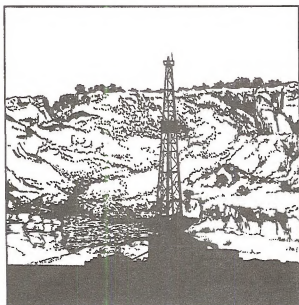
Air quality is generally affected by natural terrain and emissions. Ridges and high elevation areas usually experience better dilution and dispersion of pollutants than do valleys and low elevation areas.

Other factors are depth of the mixing layer and height of emission release.

Emissions, in the form of windblown dust from dirt roads and barren soils, cause impaired visibility. Human-caused emissions from vehicles, chemical combustions, and industrial processes cause a variety of human and animal physiological impairments and damage to structural materials, paint, fabric, and natural vegetation.

There are two types of areas vulnerable to decreasing air quality in the Resource Area. Type I locations are localized areas of extensive development such as surface mining, industrial chemical process plants, and coal-fired power plants. Type II locations are structural depressions such as the San Juan Basin that experience atmospheric drainage. These areas can be expected to suffer from a higher frequency of stagnation and decreased air quality. Some Type I activities can contribute pollution to long-range transport.

No reported areas in the FRA exceed Ambient Air Quality Standards as defined in the Clean Air Act of 1972 and subsequent legislation. The FRA lies almost entirely within the Four Corners Interstate Air Quality Control Region which includes both national (Environmental Protection Agency [EPA]) and New Mexico State (Environmental Improvement Division) designations. The air quality in the region, according to National Ambient Air Quality Standards, is as follows:



POLLUTANTS	STATUS
Total Suspended Particulates	Better than National Standards
Sulphur Dioxide	Same as above
Ozone	Cannot be classified or Better than National Standards
Carbon Monoxide	Same as above
Nitrogen Dioxide	Same as above

SOURCE: 40 CFR 81.332

Regional air quality, according to New Mexico Air Quality Standards, is as follows:

POLLUTANTS	STATUS
Total Suspended Particulates	Meeting State Standards
Sulphur Dioxide	The Mesa Verde Plateau, the Hogback area and a 2.5 mile radius around the Four Corners Power Plant were redesignated to attainment (approved by the EPA).
Ozone	Meeting State Standards.
Carbon Monoxide	The City of Farmington was redesignated as attainment in June 1981.
Nitrogen Dioxide	Meeting State Standards.

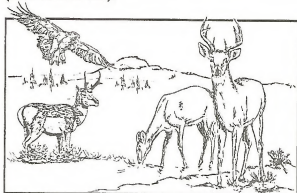
SOURCE: Air Quality Bureau Annual Report 1983-84.

SCENIC QUALITY

The landscape composition in the Farmington Resource Area is quite diverse. In general, the Resource Area is characterized by a large depression

in the earth's surface referred to as the San Juan Basin which is partially surrounded by mesas and mountains. Mountain ranges include the San Juan and La Plata Mountains to the north, the San Pedro Mountains to the east, the San Mateo and Zuni Mountains to the south, and the Chuska Mountains to the west. The San Juan Basin contains steep colorful escarpments, broad vistas, pastel-colored badlands, and rugged canyons which are prominent features of the southern portion of the Resource Area. Sagebrush and grassland expanses are prominent in the central portion of the Resource Area. Piñon-juniper woodlands, rivers, reservoirs, and other human-made structures dominate the northern portion of the Resource Area.

Scenic quality and visual sensitivity of a landscape (land, water, vegetation, wildlife, and human-made structures) are subjective and often dependent on such variables as an individual's background, personal preferences, viewing time of day, time of year - to name a few. Scenic quality values in the Resource Area have been documented in the San Juan and Chaco MFPs through the use of the Scenic Quality Inventory and Evaluation System (BLM Manual 841I).



Visual resources classes have been determined for the entire Resource Area regardless of land ownership. The class rating is based on scenic quality, visual sensitivity, and distance zone criteria. It is important to note the BLM manages only the public land visual resources.

Scenic vistas from major highway arterials, riverfronts, high places, and special management areas are important because of the associated sightseeing values. Sculpted landscapes of mesas and canyons along State Highways 371 and 44 offer high scenic values to a large number of people. Two major attractions to recreationists are water and high

places. The San Juan and Animas Rivers and the numerous mesas and mountain ranges offer views both uncommon and typical in this region. Areas where special management attention is focused, such as the Bisti and De-na-zin Wilderness Areas, Angel Peak Recreation Area, and Simon Canyon Recreation Area and Area of Critical Environmental Concern, exist partially because of high scenic qualities. Protecting vistas within these areas from outside influences is a concern.

FIRE

The fire program is basically an emergency response activity. Direction has been given from the Washington Office to implement the National Inter-agency Incident Management System (NIIMS) by 1986. The Albuquerque District implemented NIIMS in 1985, and is currently operating under that system. The number and size of fires fluctuates from year to year, depending on the occurrence of lightning storms and fine fuel build-up.

In the last 10 years the Resource Area has initiated 155 responses for an average of 15 to 16 responses per year. Of these 28 percent are false alarms believed to be small fires that have burned out before crews could arrive or oil sludge ponds being burned off by oil companies. The majority, 45 percent, are less than one acre in size; 14 percent are between one and 10 acres; 5 percent are larger than 10 acres; and 8 percent involve assisting another agency. Ignition sources are primarily lightning or man-caused. Fuels consumed are primarily cheatgrass, big sagebrush, piñon and juniper. For more details on fuel types refer to the maps and fuel models in the Normal Fire Year Plan.

WILDLIFE

Wildlife habitat and wildlife species present in the planning area have previously been described in the unit resource analyses of the San Juan and Chaco Planning Units (USDI, BLM 1979a, 1981c). The Resource Area contains three broad habitat regions: piñon-juniper woodland, sagebrush, and desert shrub-grassland. These regions correspond to the Great Basin Woodland, Great Basin Desert Shrub, and Great Basin Grassland biotic communities mapped by Brown and Lowe (1978) and described by Brown (1982).

Specific standard habitat sites and special habitat features have been mapped in the formerly designated Chaco Planning Unit but not elsewhere in the Resource Area.

The pifon-juniper habitat of the northern La Plata River Valley and the areas adjacent to the Carson and Santa Fe National Forests support significant wintering populations of mule deer and Elk. In mild winters relatively few deer or elk concentrate in these areas. Although elk numbers have been increasing in the area adjacent to the Carson National Forest, there are only a few resident deer or elk in the Farmington Resource Area at times other than the winter period. Most of the FRA south of State Highway 44 is not treated as deer or elk habitat. Approximately 100,000 acres of the Resource Area are considered important big game winter habitat.

Scattered small herds of pronghorn antelope can still be found in sagebrush and desert shrub-grassland types. However, even though there are large areas of apparently suitable habitat (Albee 1982), the population is estimated at less than 100 animals in the Resource Area and is considered to be declining, possibly due to poaching.

Comprehensive wildlife inventory data or non-game species are lacking for much of the FRA. Wildlife species lists presented in the Chaco and San Juan URA are not entirely accurate due to the lack of reliable field inventories. Two reports on file in the Resource Area provide some field inventory data. Kinskey (1977) describes a wildlife inventory which covered the Resource Area. However, the inventory area also included portions of the Carson and Cibola National Forests, which contain habitat types and species not found on the public lands in the Resource Area. A more intensive field inventory by Biowest Inc. (Albee 1982) covered only the Chaco strippable coal belt. A total of 175 species were documented, along with habitat occurrence information. Aerial big game counts conducted in cooperation with the NMDGF have been discontinued in recent years. A helicopter survey to search for big game concentration areas and raptor nests in the southern and southeastern portions of the Resource Area was conducted by BLM personnel in 1985. The existing information gathered by these inventories is considered adequate for planning.

Areas which have received special management attention in the FRA are raptor nesting areas for gold-

en eagle, prairie falcon, and ferruginous hawk; bald eagle wintering areas, and riparian habitat areas. Monitoring of golden eagle, prairie falcon, and ferruginous hawk nests has been conducted since 1981, primarily to provide information for the coal leasing program. As of July 1986 a total of 95 nests of these species has been recorded. Several nests are contained in a single territory. Based on the limited data, it is estimated that these nests represent at least 43 territories. Up to 71 percent of the known territories have been occupied by paired birds during a single breeding season.

Bald eagle winter use in the area around Navajo Reservoir is well documented (Grubb 1984, Green 1980, Hubbard 1978). Renwald (personal communication 1985) estimates 80 to 100 bald eagles roost adjacent to the reservoir between November and March each year. An additional 20-30 bald eagles winter in the Animas River Valley. Probably less than 10 winter in the La Plata River Valley.

Riparian habitat associated with permanent water on public lands in the Resource Area is limited to 36 scattered tracts. These tracts contain 853 acres of riparian habitat and approximately 2,100 acres of associated upland habitat along the San Juan, Animas, and La Plata Rivers. Other than these rivers there are no natural perennial streams on the public lands. Small cottonwood stands occur in some major washes and around a few stock reservoirs, springs, and seeps. Greasewood and rabbit-brush stands and occasional patches of tamarisk occur along some washes. Some of these areas have been mapped as special habitat features, but there is presently no estimate of total acreage of this habitat. The steep rocky nature of the borders of Navajo Reservoir, combined with substantial water level fluctuations, prevent the development of a permanent riparian vegetation border around the lake. *Numerous springs and seeps are scattered throughout the northern half of the Resource Area. Nineteen springs have been developed for wildlife. In general, wildlife use of these developments is not extensive. Four natural springs are known to occur near or on public lands in the southern half of the FRA. Again, little wildlife use or sign has been documented at these springs.*

• THREATENED OR ENDANGERED SPECIES

The Farmington Resource Area is considered potential habitat for the following federal and state listed threatened or endangered species:

TABLE 3-11:
FEDERAL & STATE LISTED SPECIES

Species	Category
Black-Footed Ferret	Federal-Endangered, <i>State Endangered</i>
Bald Eagle	Federal-Endangered, <i>State Endangered</i>
Peregrine Falcon	Federal-Endangered, <i>State Endangered</i>
Mississippi Kite	<i>State Endangered</i>
Gray Vireo	<i>State Endangered</i>
Baird's Sparrow	<i>State Endangered</i>
Colorado River Squawfish	Federal-Endangered, <i>State Endangered</i>
Roundtail Chub	<i>State Endangered</i>
Knowlton's Cactus	Federal-Endangered <i>State Endangered</i>
Mesa Verde Cactus	Federal-Threatened <i>State Endangered</i>
Mancos Milk-vetch	Federal-Endangered <i>State Endangered</i>
Zuni Fleabane	Federal-Threatened <i>State Endangered</i>
Grama Grass Cactus	<i>Fed. Cat. 2 Candidate</i> <i>State Endangered</i>
Checker Lily	<i>State Endangered</i>
Aztec Gilia	<i>Fed. Cat., 2 Candidate</i> <i>State Endangered</i>
Succulent Dwarf Saltbush	<i>Fed. Cat. 2 Candidate</i> <i>State Endangered</i>
<i>Mon. Valley Milk-Vetch</i>	<i>State Endangered</i>
<i>Arboles Milk-Vetch</i>	<i>State Endangered</i>
Wright's Fish-Hook Cactus	<i>State Endangered</i>
Whipple's Cactus	<i>State Endangered</i>

In addition the following Category 2 Federal candidate species not listed by the state have been recorded in the Resource Area: ferruginous hawk, mountain plover, spotted owl, Swainson hawk, western snowy plover, western yellow-billed cuckoo, whitefaced ibis, and spotted bat. Another Category 2 candidate, the occult bat, has been recorded in the Zuni Mountains and may possibly occur in the Resource Area. Federal Category 2 candidates are species for which information is being gathered to determine if they should be listed as threatened or endangered.

Little new information has been obtained to alter the treatment of threatened or endangered animals as presented in past planning documents. Winter surveys conducted in 1984 and 1985 following latest U.S. Fish and Wildlife Service (USFWS) guidelines (Clark et al. 1984) have not located any evidence of black-footed ferret. However, not all prairie dog towns in the FRA have been inventoried. Inventories for threatened or endangered plants conducted by the NM Heritage Program (Knight 1981, Knight and Cully 1986) and Ecosphere Environmental Services (1985) have provided information on potential and occupied habitats. Approximately 5,200 acres of the Resource Area is potential habitat for Mesa Verde Cactus and 40 acres is habitat for Mancos milk-vetch. Although there are approximately 320 acres of habitat suitable for Knowlton's Cactus, field searches of this potential habitat located no new populations on public lands. At least 125,400 acres of the Resource Area are considered habitat for Aztec gilia.

WILDERNESS

The Farmington Resource Area manages two Wilderness Areas and one Wilderness Study Area. The Bisti and De-na-zin were designated on Oct. 30, 1984. The Ah-shi-sle-pah WSA was recommended by the BLM as non-suitable for wilderness designation.

• BISTI WILDERNESS

The Bisti contains 3,946 acres of public lands approximately 30 air miles south of Farmington. It is a desolate area of upland rolling topography and badlands terrain. Hunter and Gateway washes dissect the landscape, which consists of Kirtland Shale and Fruitland Formation outcrops oriented from northeast to southwest.

The badlands, at approximately 6000 feet elevation, support minimal vegetation and wildlife species. The topography of the majority of the area consists of a profusion of compact, rolling hills, dissected by narrow washes filled with mushroom formations and spires. The highly dissected topography offers the user an outstanding opportunity to find a secluded spot in the thousands of enclosures or spaces. It is the scenic nature of the badlands themselves that adds to the recreational opportunities in the northwest corner of New Mexico. People come from all over the region to see the Bisti, and the area has received media coverage through nationally distributed magazines.

SPECIAL FEATURES

The Bisti has special geologic, scientific, educational, and scenic features. The unique geomorphic features of the Bisti, and its associated scenic quality, are the result of different rates of weathering and erosion of the sandstone and mudstone resulting in toadstool and spire formations. This area consists of three separate beds of hard, white to light tan sandstone which exhibit thin, hard, maroon concretionary sandstone capping vertical pinnacles of white sandstone. The area's overall appearance has been described as a moonscape.

• DE-NA-ZIN WILDERNESS

The De-na-zin Wilderness contains 24,100 acres and is located approximately five miles east of the Bisti Wilderness and approximately 30 air miles south of Farmington. Three major washes (Willow, Alamo, and De-na-zin) dissect the landscape from northeast to southwest. Like the Bisti, the De-na-zin is composed of the Fruitland Formation and the Kirtland Shale with alternating layers of sandstone and gray, tan, and olive variegated shales. The Ojo Alamo Sandstone and Nacimiento Formation crop out in the northeast sector of the wilderness. Vegetation ranges from sparse grassland at the 6000-foot elevation to sage, piñon, and juniper at the 6700-foot elevation.

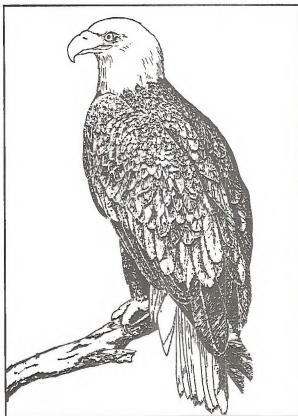
The majority of the area is composed of rough badlands topography. This topography provides an excellent buffer between potential user groups. Vegetation is sparse in the badlands; the short grasses, shrubs, and few trees provide little vegetative screening. However, this lack of vegetation gives a feeling of spaciousness that is broken only by the terrain. The varied and rugged topography provides numerous niches and secluded spots that help provide

an outstanding opportunity for solitude. Hiking, horseback riding, and photographic opportunities are concentrated in the badlands in the southern two-thirds of the area. The major washes and tributaries offer a unique and intriguing visual experience. Sightseeing associated with the supplemental values include geologic and paleontologic attractions. Petrified wood and a variety of other plant and animal fossils are abundant (USDI, BLM 1979b). The potential for seeing fossils while exploring the unique and beautiful scenery provides an outstanding opportunity for primitive and unconfined recreation.

SPECIAL FEATURES

From a paleontological standpoint, the De-na-zin Wilderness is most important for its educational and scientific values. It contains rocks of the Fruitland Formation and Kirtland Shale, deposited when dinosaurs were dominant, to the Ojo Alamo Sandstone and Nacimiento Formation, deposited as mammals became dominant.

In addition, the area contains archeological sites. The majority of these sites date to the Archaic period. The area may also contain burial sites and sacred sites with important heritage values to the Navajo Indian people.



• **AH-SHI-SLE-PAH
WILDERNESS STUDY AREA**

The Ah-shi-sle-pah WSA contains 6,563 acres of public lands and is located approximately 40 miles southeast of Farmington. The WSA, at 6000 feet elevation, is comprised of badland topography resulting from the erosion of the Fruitland Formation and the Kirtland Shale.

*The badlands offer the
opportunity for hiking,
camping, horseback riding,
sight-seeing and photography.*

The majority of the WSA contains badlands formations, upland rolling terrain, and intermittent washes. The highly rugged terrain provides an excellent opportunity for the user to find a spot secluded from other human sights and sounds (USDI, BLM 1979b). This opportunity is concentrated in the center of the WSA where the badlands occur. The remainder of the WSA consists of rolling grasslands, which do not offer much screening between the user and activities outside the WSA, or between users inside the WSA. The vegetation of the WSA does not provide significant opportunities for seclusion but, rather, emphasizes the feeling of expansive solitude.

Opportunities for primitive and unconfined recreation within the Ah-shi-sle-pah WSA are tied to its topography. The expansive rolling hills and the intricate dissected badlands provide the WSA with varied opportunities for dispersed recreation. The badlands offer the opportunity for hiking, camping, horseback riding, sight-seeing, and photography. The WSA is used primarily for day hiking, with some overnight use. Sight-seeing opportunities related to the inherent scenic, geological and paleontological values exist throughout the WSA.

SPECIAL FEATURES

The Ah-shi-sle-pah WSA has special scenic, geologic, scientific, and educational features. The scenic values of the WSA are primarily derived from the badlands topography and coloration, which are the result of geologic processes.

Because the WSA contains outcrops of the Fruitland Formation and Kirtland Shale, geological, paleontological, educational, and scientific values exist. The most complete dinosaur fossil remains found in the WAs and the WSA were removed from the Ah-shi-sle-pah WSA, and some outstanding examples of petrified stumps occur there.

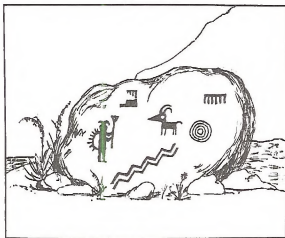
The Ah-shi-sle-pah WSA contains archeological sites that have intrinsic scientific and educational values, and sacred sites with value to the Navajo Indian people.



CULTURAL RESOURCES

CULTURAL HISTORY

The San Juan Basin is an area of major significance, containing archeological and historic resources that range from Paleo Indian sites to twentieth century historic sites. These sites span over 10,000 years of occupation including the mobile Paleo and Archaic groups, the transitional Basketmakers, the sedentary Anasazi adaptations, and the historic Navajo. The Anasazi sites include examples of both the well-known Mesa Verde and Chacoan cultures.



PALEO-INDIAN (10,000 - 5,000 B.C.)

The earliest occupants of the San Juan Basin were nomadic hunters and gatherers following herds of now extinct bison and mammoth. Evidence of Paleo-Indian sites is scant, with identification based primarily on projectile point typology.

ARCHAIC (5,000 - 1,000 B.C.)

Subsistence adaptations shifted to hunter and gatherer strategies using plant and animal resources. Sites appear to be concentrated in the north and northeastern sections of the San Juan Basin and are commonly found in upland dunes, on elevated ridges, and/or on mesas near water sources (Judge 1982). Sites are indicated by lithic scatters and associated soil stains or hearths.

BASKETMAKER (1,000 B.C. - A.D. 700)

This period was one of transition from a nomadic to a sedentary lifestyle. Agriculture became far more dominant in subsistence strategies by the end of the period. Ceramic technology also became

more sophisticated. Higher site densities are found in the southwest, west-central, and far northeast portions of the Basin. Site features include pithouses, hearths and cists, artifact scatters, and trash middens.

PUEBLO I (A.D. 700 - 900)

Sedentism was well-established and habitation sites include above-ground rooms of jacal (wattle and daub) with masonry footings; subsurface pit-houses evolved into kivas. Site density is generally low, but higher site densities are found in the northeastern portion of the Basin and near perennial streams (Cordell 1982).

PUEBLO II (A.D. 900 - 1050)

Anasazi sites were most widespread during this period (Lipe 1978). Small masonry pueblos were the dominant habitation site type and ceramic styles were varied (Cordell 1982). The large Chacoan towns were in the final stages of construction and were scattered throughout most of the Basin. The complex Chacoan system has been described as a huge wheel with a hub centered at Chaco Canyon and linked by prehistoric roads to about 80 outlying towns and/or communities containing Chacoan attributes (Stuart and Gauthier 1981).

During Pueblo II there were essentially three levels of development occurring simultaneously in the San Juan Basin: a basketmaker-like adaptation in the Navajo Reservoir district where the population was using a mixed strategy of foraging and agriculture and living in pithouses and jacal structures; localized groups living in small multi-room masonry pueblos and depending primarily on an agricultural subsistence base; and the Chacoan phenomenon with a highly organized social and economic network.

PUEBLO III (A.D. 1050 - 1300)

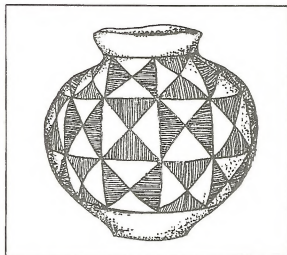
The Chacoan system collapsed early in the twelfth century. Chacoan sites were then briefly reoccupied by a population exhibiting Mesa Verde traits (i.e. ceramic styles and architectural techniques). Newly built sites were smaller and appear to be clustered in areas of higher elevation like Chacra Mesa and Mesa Portales.

The Navajo Reservoir area was abandoned by the beginning of this period with the population probably shifting east and south to form the basis of the Gallina phase occupation near Lindrih and Llaves. These sites still exhibited the Basketmaker-Pueblo I characteristics of pithouses and jacal struc-

tures, but also included stockades and were often located in defensible positions. Many sites were burned and the skeletal remains show evidence of violent death. By A.D. 1300, the Anasazi had abandoned the San Juan Basin and shifted east to the Rio Grande Valley and west into Arizona.

HISTORIC (A.D. 1500 - Present)

Although some Athabaskan groups may have moved south into the Basin in the twelfth and thirteenth centuries, Navajo culture does not become clearly evident until at least the mid-1500s. New evidence of an early Navajo occupation dating to the A.D. 1400s has recently been uncovered in the La Plata Valley. Solid evidence of Navajo occupation in the Gobernador area dates to the late 1600s. These early sites usually consist of ceramic and lithic scatters associated with hearths and soil stains. Spanish records document forked-stick hogans and pueblitos in the early to mid-1700s. These sites are defensively positioned on mesa tops, cliff faces, and on top of large boulders. The early Navajo economy was based on a mixture of farming, hunting, trading, herding, and occasional raiding (Wozniak and Winter 1983). At this same time, Pueblo Indians from the Rio Grande joined the Navajo to escape Spanish oppression.



Attacks by the Utes and changes in environmental conditions resulted in Navajo abandonment of the Gobernador area by 1775. The latter part of the 1700s was also characterized by a transition from dependence on agriculture to adoption of pastoralism. Conflicts with the Ute continued into the nineteenth century and encounters with the U.S. military increased. In 1864 2,400 Navajo began the "Long Walk" to the

Bosque Redondo, near Ft. Sumner. The financial burden of maintaining facilities for 8000 to 8500 people led to the abandonment of the Bosque Redondo experiment and the creation of the Navajo Treaty Reservation with the United States in 1868 (York 1984). Later Navajo adaptations, settlement areas, and historical events are well summarized in Brugge (1980 and 1981), Wozniak and Winter (1983), Hogan and Winter (1983), and York (1984) and other documents.

Beginning in the late 1870s, Euro-American settlers began moving into the San Juan, La Plata, and Animas River valleys. The early economy focused on agriculture and grazing. A recent overview of settlement in the La Plata valley is presented in Dykeman and Langensfeld (1984).

INVENTORY AND SUMMARY

The Farmington RA's cultural resource data base has recorded 1,234,000 acres of inventory on federal and non-federal lands in the San Juan Basin. Of these, only about 471,000 acres (see Table 3-12) of inventory are considered to contribute reliable information about the location and identification of the full range of cultural resource sites.

Most of the inventories on BLM land consist of small areas covered prior to surfacedisturbing activities associated with oil and gas development. Large Class II and Class III inventories have been conducted prior to coal leasing, development of surface mines, and other large surface-disturbing projects (Huse et al. 1978; Beal 1978, 1978a, 1978b, 1979; Dulaney 1981; Powers et al. 1980; Kemmer 1982; Harlan 1982; BLM Class II inventory for the SJRRR EIS, preliminary report 1982).

TABLE 3-12: ACRES INVENTORIED FOR CULTURAL RESOURCES

Area (1:100,000)	BLM	Other	Total	(%)
Farmington	28,184	135,568	163,752	(2.1%)
Navajo				
Reservoir	5,677	1,328	7,005	(0.1%)
Toadlena	23,567	110,330	133,897	(1.7%)
Chaco				
Canyon	38,574	44,910	83,584	(1.1%)
Gallup	3,802	27,116	30,918	(0.4%)
Chaco Mesa	29,244	22,888	52,132	(0.7%)
TOTAL	129,148	342,140	471,288	(6.1%)

To date, 18,292 sites with a total of 21,548 components have been recorded within FRA boundaries. Of these, 4,275 components are located on lands administered by the BLM. A component is a period of occupation, i.e. Archaic, Basketmaker, or Pueblo, etc. Therefore, a site with evidence of occupation from A.D. 200 - 900 would contain three components (Basketmaker, Pueblo I and Pueblo II).

Site components and ownership are broken down as follows:

TIME PERIOD	BLM	OTHER	TOTAL	%
Paleo	6	29	35	(0.16)
Archaic	250	656	906	(4.20)
Basketmaker	160	802	962	(4.46)
Pueblo	1,009	5,302	6,311	(29.29)
Navajo	842	1,728	2,570	(11.93)
Historic	850	4,160	4,956	(23.00)
Unknown	1,158	4,650	5,808	(26.95)
TOTAL	4,275	17,273	21,548	100.00

Chacoan, post-Chacoan, and Navajo Refugee sites are currently represented on the National Register of Historic Places (NRHP). These sites are described in Stuart and Gauthier (1981). Current National and State Register lists are also available from the State Historic Preservation Officer (SHPO).

Sites listed on the National Register of Historic Places include the Twin Angels and Halfway House outcrops, the Chaco Mesa Thematic Group (40 sites), the East Side Rincon Site, and the Navajo Refugee Pueblo thematic group which includes 34 sites on BLM land. This thematic group incorporated the Crow Canyon Archeological District, the only district in the BLM-FRA currently listed on the National Register. All of these listed sites, as well as three additional Chacoan outcrops, are also listed on the State Register of Cultural Properties.

Formal determination of eligibility has been completed on 1,197 sites in the FRA. Of these, 896 were declared eligible for the National Register. In addition, of 1,128 sites, 998 have been informally recommended as eligible during Section 106 consultation for numerous projects related primarily to oil and gas development. These figures suggest that approximately 80 percent of the sites in the San Juan Basin warrant protection under the National Historic Preservation Act of 1966 (NHPA).

PALEONTOLOGY

A variety of paleontological resources exist in the Farmington Resource Area. Among them are both invertebrate and vertebrate animal fossils; fossil leaves, palynomorphs, and petrified wood; and trace fossils. These occur in the Triassic, Jurassic, Cretaceous, and Tertiary-aged rocks of the San Juan Basin.

Several paleontological inventories, surveys, and assessments have been done in the area now encompassed by the Resource Area. There have been both reconnaissance and site-specific inventories, and those combining both types. Due to the high rate of erosion in the shales and mudstones, much of the earlier site-specific inventory data may now be unreliable. Areas that have been shown to be productive in previous reconnaissance inventories will probably continue to be important as they do not rely on isolated occurrences of a particular specimen or specimens.

Le Mone et al. (1979) did an inventory for the proposed La Plata coal mine on the New Mexico-Colorado state boundary. Examples of all the major groups of fossils found in the San Juan Basin were found in this study located in Township 32N, and Ranges 12W, and 13W. Site-specific inventory data were collected and recorded from the rocks of the Lewis Shale through Kirtland Shale that crop out in the examined area.

Ash et al. (1979) did a survey of the San Juan Planning Unit of the FRA and of the Rio Puerco Resource Area. They indicated that all of the sedimentary units from the Point Lookout Sandstone on up, except the Quaternary alluvium, contain fossils of some type. Additionally they indicated four areas within the Resource Area that are paleontologically significant and merit mitigation. These areas are: the Santos Peak area, with an important paleobotanical content and potential for vertebrate remains in the Eocene San Jose Formation; Kutz Canyon, which has numerous Paleocene mammal localities in the Nacimiento Formation; the area west of Farmington, because the type sections of the Pictured Cliffs Sandstone, Fruitland Formation, and Kirtland Shale are on, or adjacent to, public lands in the Resource Area; and the Regina area, which produced the classic vertebrate collections of the early paleontologists Cope, Granger, and Simpson, from the San Jose Formation.

The paleontological resources of the southern portion of the Resource Area were surveyed for the BLM (Flessa 1981) in the stratigraphic section exposed in the area ranging from the Triassic Chinle Formation through the Cretaceous Menefee Formation and the Pliocene Bidahochi Formation. Fossils were found in all of the formations except the Entrada Sandstone, Bluff Sandstone, and Cow Springs Sandstone. Fossil content ranged from sparse to abundant. Five sites were recommended for preservation or mitigation of their paleontological resources. One of these sites contains two type sections (the Two Wells Sandstone Tongue of the Dakota Sandstone and the Whitewater Arroyo Shale Tongue of the Mancos Shale). This site was recommended to be preserved as an important reference section, particularly since it has yielded biostratigraphically important fossils.

Kues et al. (1977) completed a survey of a large portion of the San Juan Basin. A literature search, reconnaissance, and intensive surveys were accomplished for the study. This resulted in a resource assessment, a suggested mitigation plan for coal mining, and a recommendation of six areas as paleontological preserves. The majority of the federally owned surface of two of the preserves is now part of the Bisti and De-na-zin Wilderness Areas. One of the other proposed preserves is now the Fossil Forest Research Natural Area (RNA). A portion of the proposed Torreon Wash Paleo Preserve was designated an Area of Critical Environmental Concern in the Rio Puerco RMP as the Torreon Fossil Fauna ACEC. Part of this area is in the FRA. Two additional areas are Kutz Canyon and Bctonnie Tsosie Wash.

Froelich and Kues (1977) reviewed literature and previous collections from paleontological research in the areas near Bisti, N.M., that are leased to Western Coal (now Sunbelt Mining Co.) and Public Service Company of New Mexico. Additionally, all exposures within the leased land were intensively surveyed, including fossil collection from many of the 171 localities identified. Nearly 50 taxonomic groups of plants, vertebrates and invertebrates were found.

Chaco Energy Co. (1977) conducted a survey for their proposed Star Lake Coal Mine. This included an inventory of the area and a proposed mitigation plan. No critical areas requiring withdrawal were noted. Eleven significant sites were identified and 58 other sites were located that merit some mitigation.

The Fossil Forest RNA was *withdrawn* under the San Juan Basin Wilderness Protection Act of 1984 for its paleontological value. It contains over 40 petrified tree stumps. Of greater scientific value are its dinosaur and mammal fossils. Collection permits may be issued for research, museum, or educational projects. The New Mexico Bureau of Mines and Mineral Resources is conducting an ongoing study of the vertebrate fossils in the RNA.

For the most part, the paleontological resources in the FRA are available for both public and scientific uses. Coal and uranium mining may potentially impact the resources. Oil and gas operations have not affected paleontological resources much since the companies tend to avoid rock outcroppings, particularly badlands. Illegal hobby collection and unpermitted commercial sales of vertebrate fossil material are suspected to be occurring, but it is difficult to evaluate the extent of this impact.

OUTDOOR RECREATION

Public lands in the Farmington Resource Area offer the opportunity to enjoy outdoor recreation in three major categories - developed, dispersed, and motorized recreation.

• DEVELOPED RECREATION

Developed recreation opportunities are those which partially rely on human manipulation or improvements of the land, as is the case with Angel Peak Recreation Area and Simon Canyon Recreation Area. Recreation opportunities at Angel Peak include hiking, sightseeing, vehicle and tent camping, and picnicking. Support facilities include camping pads, picnic shelters, outhouses, and parking areas. Opportunities at Simon Canyon include hiking, fishing, tent camping, and picnicking. Support facilities include parking areas, scenic viewing areas, and trails.

• DISPERSED RECREATION

Dispersed recreation opportunities occur on public lands throughout the Resource Area. These opportunities rely predominantly on a natural landscape and include photography, hiking, backpacking, picnicking, horseback riding, hunting, and sightseeing related to geologic, cultural, wildlife, and visual resources. The proposed Continental Divide National Scenic Trail corridor, as identified in the Continental Divide National Scenic Trail Comprehen-

sive Plan (USDA 1985), traverses the southeast portion of the FRA. The approved Rio Puerco Resource Area RMP has identified a treadway that places the only feasible location of a treadway in the Farmington Resource Area in the Mount Taylor Ranger District of the U.S. Forest Service. In this light there are no BLM-administered lands in the Farmington Resource Area that are conducive to treadway placement.

Opportunities exist for water-related recreation along BLM riverfront property on the San Juan and Animas Rivers. The Bisti and De-na-zin Wilderness Areas and the Ah-shi-sle-pah Wilderness Study Area have been formally identified as containing outstanding opportunities for primitive and unconfined types of recreation.

• MOTORIZED RECREATION

Motorized recreation on public lands includes opportunities for off-highway vehicles (OHV – off the pavement, on existing maintained or primitive roads) and off-road vehicles (ORV – cross-country travel, off existing routes). Motorized vehicle use by various classes and types of motorcycles, dune buggies, all-terrain vehicles, and four-wheel drive vehicles occurs mainly near population centers and near major highway arterials. Concentrated use is known to occur in the Glade north of Farmington, and on the bluffs south of Farmington. Four-wheel driving associated with woodcutting, hunting activities, mineral exploration and development, livestock operations, and administrative use of the lands occurs throughout the FRA.

• RECREATION OPPORTUNITY SPECTRUM (ROS)

Outdoor recreation opportunities on public lands in the ROS Study Area are mostly in the Roaded Natural Class (79.7 percent of the study area contain types of recreation opportunities that can be described as facility/equipment and vehicle dependent in a natural-appearing, but modified environment). Rural types of recreation opportunities are available on the scattered river tracts in the floodplains of the La Plata, Animas, and San Juan Rivers. Semi-primitive motorized types of recreation opportunities are available in the southern and extreme eastern portions of the study area as well as intermittent islands in the northern portion. Semi-primitive non-motorized types of recreation are concentrated among wilder-

ness resources in the southern portion of the study area. There are no areas that exhibit primitive types of recreation opportunities.

The quality of outdoor recreation is diminished due to problems associated with the availability and distribution of recreation opportunities across the spectrum. A breakdown of ROS Inventory Classes are as follows:

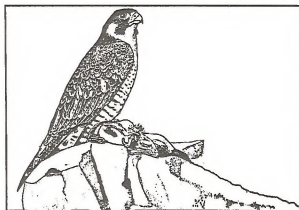
ROS INVENTORY

<u>ROS CLASS</u>	<u>ACREAGE</u>
Primitive (P)	= 0
Semi-primitive non-motorized (SPNM)	= 19,000
Semi-primitive motorized (SPM)	= 180,000
Roaded Natural (RN)	= 901,400
Rural (R)	= 30,000
Urban (U)	= 0

As inventoried, portions of the Bisti and De-na-zin Wilderness Areas fall into the semi-primitive motorized ROS Class. This is due to vehicular travel on boundary roads and legal travel necessary for reasonable ingress and egress to private inholdings. It should be noted that unauthorized use of motorized or mechanized travel in wilderness is prohibited by the Wilderness Act of 1964.

• RECREATION MANAGEMENT AREAS (RMA)

There are three Special RMAs in the Farmington Resource Area and one Extensive RMA. An RMA is a subunit of the Resource Area as identified by Bureau Manual 8300. The three Special RMAs are the Bisti Wilderness, the De-na-zin Wilderness, and the Simon Canyon Recreation Area and ACEC. The Extensive RMA represents the remainder of the FRA.



SOCIAL AND ECONOMIC CONDITIONS

The Resource Area as considered for social and economic conditions includes all of San Juan County, McKinley County (excluding a small area around the Ignacio Chavez Grant which is administered by the Rio Puerco Resource Area office), nearly 40 percent of Rio Arriba County, including the Jicarilla Reservation, and less than 10 percent of Sandoval County west of Cuba. The social and economic analysis in this chapter considers all consequences on a Resource Area-wide basis. Due to the significance of the impacts associated with some issues, the consequences of resolution of these issues have also been given local consideration.

• POPULATION

The total population for the Resource Area reported by the 1980 census was 142,746. Except for Rio Arriba County the Resource Area counties grew faster between 1970 and 1980 than the state did. The population figures reported by the 1980 census for the largest communities in the FRA are Farmington (31,222), Gallup (18,167), Shiprock (7,237), Zuni (5,551), Aztec (5,512), and Bloomfield (4,881).

• EMPLOYMENT AND INCOME

Changes in per capita income from 1970 to 1980 showed San Juan County increased by 164.3%, Rio Arriba by 159%, McKinley by 144.4%, and Sandoval by 228.6%. Of the four counties only McKinley had a smaller increase in per capita income than the state. The percentage increases in employment for all four counties exceeded their percentage increases in population for the decade from 1970 to 1980. The employment situation has changed significantly since 1980. Many energy-related jobs have been lost.

• RANCH BUDGETS

On the 246 grazing allotments in the Farmington RA, the consequences of livestock grazing use on 138 have previously been analyzed, including the social and economic analysis, in the San Juan Grazing Management EIS (USDI, BLM 1980).

One hundred of the allotments considered in this document are Section 15 leased lands (generally small, isolated, and scattered tracts of public land). No changes in grazing management are proposed for

most of the Section 15 allotments because no cost-effective improvement in resource conditions would result from implementation of management changes. Since currently available data are inadequate for the development of ranch budgets for these allotments, no further descriptions of these operations are included in this chapter.

The remaining 17 Section 15 allotments and seven Section 3 allotments in the vegetative uses issue area are considered in this analysis. These allotments were divided into groups for analysis and a ranch budget was developed for the sheep groups and one for the cattle groups. The basis for the grouping was first the selective management categorization, and secondly type of use, in that the community allotments were separated from the other "I" category allotments. The diversity in size of allotments and the smallness of numbers requires making more assumptions in the analysis than is desirable but professional judgment was used in making these decisions. Some of the budget-type data are summarized in Table 3-13.

Both regional and local significance of the consequences of the proposed changes in grazing management have been analyzed. The regional consequences were derived by considering the allotments collectively, while local consequences were determined by considering each operation individually.

• SOCIAL SETTING

The Farmington Resource Area has a long history of habitation by Native Americans, Hispanics, and non-Hispanics. Each group holds social and cultural values distinctly its own, but each group has been required to make accommodations for others, resulting in a colorful and diverse social setting. The FRA's population has had substantial growth over several decades with some ups and downs related to economic development cycles and shifts between urban and rural growth. Farmington and Gallup are the trade centers for the area.

The social and cultural values held by the large Navajo segment of the population give a distinct social setting to the area and call for the implementation of some unique approaches to social and economic challenges in the FRA.

• ATTITUDES

Attitudes expressed by groups and individuals who have been involved in BLM's planning process

are as diverse as their social values. Most of these attitudes have been in favor of a continuation of the use of the public lands already being made by that person or group. All issues had both support and opposition.

Special management areas are generally supported for the protection they provide for cultural resources, recreational opportunities, and other resources. Concern was expressed that SMAs might restrict present uses.

The transportation issue (ORV designation) was highlighted because areas would be designated for recreational ORV use and ORV events. Designations were also supported because protection for conflicting resource uses such as livestock management would be provided. "Closed" and "limited" designations were opposed by some ORV recreationists if ORVs were restricted from areas presently used and readily accessible. "Open" and "limited" designations were opposed by some ranchers if areas where ORV use conflicts with grazing were left open to ORV use.

The attitude of the local population toward land

ownership adjustments is not fully known. However, there seems to be general support for maintaining a land base for general public use. There is strong interest among the Navajo people and their leaders in acquiring all lands that are available through the land ownership adjustment issue.

Fuelwood supply is of concern to those who have had access to a free supply of heating and cooking fuel for many years and now find that fuelwood has become expensive and that the supply is much smaller and less accessible than it used to be.

Local attitude toward coal leasing seems favorable, perhaps because some individuals burn coal and several are employed in coal production. Many people not immediately within the area express concern that mining could destroy other significant resources. The Navajo people have concerns about mining coal because it destroys the grazing and because their cultural and traditional values are contrary to digging up the earth. Even with these concerns a number of the Navajo people work the mines and the Tribe continues to negotiate contracts for the production and use of the coal resources.

TABLE 3-13: NAVAJO LIVESTOCK BUDGET

Costs Per Head:

Feed - Grazing Permits (21.33 acres/sheep unit year long @ \$.07/acre)	\$1.50
Supplement 60# bale for \$3.00 or 5/lb. x 15#	.75
Veterinarian -	1.70
Trucking (60 miles @ .25 = \$15 for 10 head)	1.50
Other Miscellaneous	1.50
Total	\$6.95

Returns Per Head:

High Production: Lamb 65# @ .55 = \$37.75 x .60 (60% lamb crop)	\$21.45
Cull Ewes 100# @ .35 = \$35.00 x .20 (20% replacement)	7.00
Wool + Incentive 7# @ .55 = \$3.85 + (3.85 x .80 = \$3.08)	6.93
Total	\$35.38
Low Production: Lamb 60# @ .55 = \$33.00 x .60 (60% lamb crop)	\$19.80
Cull Ewes 100# @ .35 = \$35.00 x .20 (20% replacement)	4.00
Wool + Incentive 7# @ .50 = \$3.50 x .80 = \$2.80 + \$3.50	6.30
Total	\$30.10

High Net Return = \$35.38 - \$6.95 = \$28.43 or \$28.50

Low Net Return = \$30.10 - \$6.95 = \$23.15 or \$23.00

Environmental Consequences

This RMP is considered a major federal undertaking requiring the analysis of the effects of implementing the proposed action and other alternatives considered. A detailed analysis on environmental consequences was presented in the Draft Resource Management Plan and, based on public comment, this assessment was determined to be adequate. A summary of impacts is presented in Table 3-14 on the following pages and any changes in analysis are identified in the Modifications and Corrections Section of this document.

The Proposed RMP closely resembles the Preferred Alternative of the Draft which has been modified slightly based on public comment. All changes fall within the range of alternatives considered in the draft and therefore, a new analysis of environmental impacts is not needed to implement the Proposed RMP.

Modifications to Alternative D of the Draft RMP include bringing forward a portion of the outdoor recreation acquisition zone of Alternative B, now referred to as the wilderness acquisition zone.



TABLE 3-14: ENVIRONMENTAL CONSEQUENCES ANTICIPATED PER ALTERNATIVE

**ALTERNATIVE A
(Current Management/No Action)**

MINERALS

The main potential long-term impact would consist of conflicts associated with the creation of up to 73,223 additional acres of split estate lands. A total of 39 competitive coal tracts would be carried forward for further consideration for leasing. Only three percent of the Resource Area would be closed to oil and gas development.

RANGELAND

No changes in ecological condition would be expected on a minimum of 62 percent of the allotments in the issue area. Impacts to range resources would be negative to "I" allotments, and to allotments affected by coal mining activities. Short-term negative impacts would occur as a result of the resolution of the home use fuel sources issue. The resolution of the transportation and land ownership adjustments issues could have long-term negative effects, which can be mitigated in the case of the land ownership adjustments issue. Long-term impacts would occur as a result of the resolution of the coal leasing suitability assessment issue, but would be mitigated by reclamation after mining is completed.

LANDS

Land ownership adjustments could occur on approximately five percent (73,223 acres) of the total public lands in the Resource Area which would result in overall beneficial impacts to

**ALTERNATIVE B
(Resource Conservation)**

Up to 98,945 acres of split estate land, which could hinder mineral development, would be created. A total of 14 coal tracts would be brought forward for further consideration for leasing. While there would be a three percent decrease in lands available for oil and gas development, the impacts are considered insignificant.

A reduction of 25,822 AUMs is estimated for the "I" and selected "C" category allotments. The increased vegetative production that would occur in the long term on the "I" category allotments would be reserved for improved watershed condition and enhancement of wildlife habitat. Short-term improved vigor of preferred livestock forage and long-term improvement in ecological condition would be anticipated on the "I" category allotments.

If coal mining takes place, long-term impacts would occur on a maximum of ten percent of the allotments and two percent of the federal lands in the issue area, but they would be mitigated by reclamation. The resolution of the transportation and land ownership adjustments issues could have minor long-term negative effects, which can be mitigated in the case of the land ownership adjustments issue.

A total of 98,945 acres are identified for disposal. Long-term positive impacts of the proposed acquisition, disposal, and rights-of-way designations would improve management

**ALTERNATIVE C
(Resource Production)**

Up to 396,800 acres of split estate lands would be created. Seventeen coal tracts would be brought forward for further consideration for leasing.

An increase of 5,509 AUMs is estimated for the "I" category grazing allotments. Long-term improvement in ecological condition and increases in vegetative production would be expected on these allotments. Long-term impacts would occur as a result of the resolution of the coal leasing suitability assessment issue on a maximum of 2.3 percent of the federal lands in the issue area, but they would be mitigated by reclamation. The resolution of the transportation and land ownership adjustments issues would have minor long-term negative effects, which can be mitigated in the case of the land ownership adjustments issue. Resolving the home use fuel sources issue would increase negative impacts.

396,582 acres of public lands are identified for exchange or sale. Only 5,527 acres of non-public lands are identified for high-priority acquisition. All other non-BLM lands in the

**ALTERNATIVE D
(Preferred)**

Up to 325,000 acres of split estate lands would be created. A total of 17 coal tracts would be brought forward for further consideration for leasing. Development of the Coal Belt SMA and the ROW windows would benefit the coal program.

A long-term reduction of 15,174 AUMs is estimated for the "I" and selected "C" category grazing allotments. In the long term the reduced AUMs would be partially restored on "I" allotments. In the short term, vigor of preferred livestock forage and ecological condition would improve on the "I" allotments. In the long term, resolution of resource conflicts would be expected on the "I" allotments. Long-term impacts would occur as a result of the resolution of the coal leasing suitability assessment issue on a maximum of 2.3 percent of the federal lands in the issue area, but they would be mitigated by reclamation. The resolution of the fuel sources and land ownership adjustments issues would have minor long-term negative effects, which would be mitigated by proper silvicultural practices and stipulations and possible exchange agreements, respectively. Negative impacts associated with ORV designations are not considered significant overall, but could impact localized areas.

A total of 119,313 acres are identified for acquisition while 324,942 acres are identified for disposal. Four right-of-way windows are identified. These actions will have positive effects.

TABLE 3-14 (Continued): ENVIRONMENTAL CONSEQUENCES ANTICIPATED PER ALTERNATIVE

public land management. Creation of split estate lands due to adjustments could create moderate impacts on the granting of ROWs and approvals for the development of mineral resources on those lands.

FORESTRY

Continuation of present low-level forest and woodland management practices may result in continued unauthorized fuelwood cutting and possible long-term reduction in areas of woodland forest types. About 2,500 cords of fuelwood per year could be harvested on a sustained yield basis in the RA.

SOILS

Land ownership adjustments would not result in significant impacts to soils resources if soil improvement and erosion control structures are maintained. Natural erosion would continue within badlands. Coal mining would result in significant long-term disturbance to 2.4 percent of the soils in the Resource Area, but the impacts would be mitigated by reclamation efforts. Impacts to soils from off-the-road vehicular travel can be mitigated by emergency closure. Sediment yields and soil erosion would continue at the present rate or could increase on grazing lands in poor ecological condition.

HYDROLOGY

Localized long-term impacts to water resources could occur on lands where off-the-road vehicular travel is not restricted. Peak runoff rates

efficiency and effectiveness. Long-term negative impacts would consist of increased conflicts resulting from the creation of additional split estate land.

Short-term impacts would be a reduction in the amount of fuelwood available to the public and a possible increase in unauthorized cutting of green trees. A potential long-term impact would be the deterioration of woodland sites due to reduced management.

Land ownership adjustments would not impact soils if soil improvement and erosion control structures are maintained. Reductions in erosion and sediment production would be expected on 315,303 acres within SMAs. Some natural erosion would continue within badlands. Long-term impacts to *less than one percent* of the soils in the Resource Area would occur from coal mining activities, but the impacts would eventually be mitigated by reclamation efforts. Approximately 21 percent of the public lands could receive protection from ORV impacts. Improvements in negative vegetative conditions should also improve soil conditions.

Improvements in vegetative conditions would result in improvements to water resources. Implementation of habitat management plans on

retention zone would be considered for acquisition as a second priority. Long-term positive impacts of these actions would be improved management efficiency and effectiveness on consolidated lands. The long-term negative impact would be the potential increased conflicts caused by the creation of additional split estate lands.

About 250 to 300 acres of fuelwood would be available for harvest each year. Silvicultural treatments would be employed to maintain and enhance woodlands.

Land ownership adjustments would not impact soils if soil improvement and erosion control structures are maintained. Increases in acreage available for the collection of fuelwood may increase impacts to the soil resource. Long-term impacts to less than one percent of the soils would occur from coal mining activities. The impacts would be mitigated by reclamation efforts. Natural erosion would continue within badlands, and would be accelerated on two SMAs designated for ORV use. Soils would receive long-term positive benefits on "I" category grazing allotments.

Land ownership adjustments would not result in significant impacts to water resources. Short-term impacts would occur as a result of the fuel-

Long-term positive impacts of these actions would be improved management efficiency and effectiveness on consolidated lands. The long-term negative impact would be the potential increased conflicts caused by the creation of additional split estate lands.

Less than 20,000 acres of productive woodland and forest would leave federal ownership. Both forest and woodland management would be improved by the initiation of silvicultural treatments.

Land ownership adjustments would not impact soils if soil improvement and erosion control structures are maintained. Off-the-road vehicular travel would not have long-term significant impacts. Increases in acreage available for the collection of fuelwood may increase impacts to the soil resource. Long-term impacts to less than one percent of the soils would occur from coal mining activities. The impacts would be mitigated by reclamation efforts. Reductions in erosion and sediment production would be expected on 132,439 acres within SMAs. Natural erosion would continue within badlands. Long-term decreases in erosion and sediment production would be expected on the "I" category grazing allotments. Short-term increases in erosion and sediment production would occur on soils within the Right-of-Way Windows SMA.

Land ownership adjustments would not result in adverse impacts to water resources. Implementation of habitat management plans on acquired

TABLE 3-14 (Continued): ENVIRONMENTAL CONSEQUENCES ANTICIPATED PER ALTERNATIVE

would remain high and sediment and salt yields would increase under the current levels of grazing management, resulting in long-term significant impacts.

acquired riparian tracts would benefit water resources. Impacts of fuelwood collection would be minimized by designating fuelwood collection areas. ORV "closed" and "limited" designations for approximately 21 percent of the Resource Area may result in slightly decreased sediment and salt yields and runoff rates. Impacts of coal mining would affect less than one percent of the federal surface.

wood program. However, watershed improvement would occur in the long term due to rehabilitative measures. Negative impacts from off-the-road vehicular travel on much of the FRA would result in long-term localized increases in sediment and salt yields as well as runoff velocities and volumes. Impacts of coal mining to water resources would affect less than one percent of the federal surface. Runoff would decrease on grazing lands where ecological condition improves. Peak runoff rates would remain high and sediment and salt yields would increase on grazing lands in poor ecological condition.

riparian tracts would benefit water resources. Impacts from fuelwood collection would be mitigated by rehabilitation measures. While the designation of approximately nine percent of the Resource Area as "limited" or "closed" to off-the-road vehicular travel would benefit water resources, designation of the remainder of the public lands within the FRA as "open" to off-the-road vehicular travel could result in increases in peak runoff rates and sediment and salt discharges in localized areas. Impacts of coal mining to water resources would affect less than one percent of the federal surface. Runoff would decrease on grazing lands where ecological condition improves. Peak runoff rates would remain high and sediment and salt yields would increase on grazing lands in poor ecological condition.

AIR QUALITY

There is no overwhelming impact to air quality as a result of current management practices. However, the cumulative effect from emissions is a concern.

Some improvement in air quality may be expected above that described in Alternative A, however, it is not expected to change substantially.

A reduction in air quality may result due to proposed actions under this alternative. Impacts would be slightly greater than in Alternative A.

Resolution of issues proposed under this alternative are not expected to cause significant impacts to air quality. It is probable that localized areas may suffer short-term degradation of existing air quality due to the cumulative effects of emissions.

SCENIC QUALITY

There may be a trend of visual resource degradation commensurate with the level of natural resource development, but mitigative measures would be used to reduce negative impacts. The majority of public lands have incurred moderate to high long-term visual contrasts in the characteristic landscape which has resulted in decreased scenic quality in the FRA.

Protection of SMAs and other areas that exhibit high scenic quality and high visual sensitivity would ensure a sample of quality visual resource opportunities in the Resource Area. This would produce positive benefits for scenic quality.

A trend of visual resource degradation commensurate with the level of natural resource development will likely occur with gradual deterioration of scenic quality on the majority of public lands due to visual contrasts in the characteristic landscape.

The designation of additional SMAs that prescribe VRM Class I or II management objectives would enhance and protect a sample of areas that exhibit high scenic quality and high visual sensitivity.

WILDLIFE

Continuation of present management will not result in short-term changes in wildlife habitat or populations. BLM will continue to meet its legal responsibilities under the Endangered Species Act. A possible long-term negative im-

A total of 98,948 acres of low-priority wildlife habitat would be sold or exchanged while 101,350 acres of high-priority habitat are identified for acquisition. *Important bald eagle roosts would be protected. A sensitive*

Up to 396,582 acres of wildlife habitat would be removed from federal ownership. Only 20,369 acres are considered moderate to high priority big game habitat. Habitat for sensitive plant species would not be managed other than

Up to 324,000 acres of wildlife habitat would be removed from federal ownership. Approximately 22,200 acres are in difficult to manage tracts of high-value big game habitat are identified for disposal while 101,350 acres

TABLE 3-14 (Continued): ENVIRONMENTAL CONSEQUENCES ANTICIPATED PER ALTERNATIVE

part of this alternative could be the continued decline of candidate or sensitive plant species, due to a lack of special management for these species.

WILDERNESS

The current management situation of the SMAs results in positive, short- and long-term benefits to the Wilderness Areas. Adjacent leasing and development of surface coal is projected to have potential negative, short- and long-term impacts to wilderness characteristics.

CULTURAL RESOURCES

Under this alternative, impacts to cultural resources are mixed. Positive effects will result from Chacoan Outlier management. Cultural resources could also be positively affected by acquisition of significant sites on Middle Mesa. On the other hand, negative impacts are occurring as a result of unlimited and uncontrolled access associated with development and off-the-road vehicular travel.

PALEONTOLOGY

Of the issues identified, SMAs which enhance paleontological research have the greatest positive impact on paleo resources.

plant HMP would be developed for the Resource Area. Off-the-road vehicle travel will be limited or excluded from 27,490 acres of threatened or endangered species habitat, which will result in beneficial effects to these species.

Resolution of the lands and SMA issues would result in positive short- and long-term effects on wilderness resources. The coal issue may result in negative, short- and long-term effects if tracts are leased adjacent or close to wilderness lands.

This alternative would have a long-term, positive effect on cultural resources. Protection and management of significant cultural resource sites would be more balanced with a variety of prehistoric and historic occupations represented in the special management spectrum.

The designations to close or limit off-the-road vehicle use results in beneficial effects to specific areas with high cultural resource values. Potential adverse impacts could occur on a site-specific basis in "open" areas if off-the-road vehicular travel results in damage to sites.

Of the issues identified, SMAs which protect important paleontological type localities would result in the greatest positive impact on paleo resources. None of the other issues would have a significant effect.

by case-by-case consideration of potential disturbing activities. Overall impacts to the wildlife program would be slight, as existing policy and habitat management plans would remain in effect. A lack of positive management for rare plants could result in long-term negative impacts to these species.

The effects of the lands issue could be negative, short- and long-term. The coal issue could cause negative, short- and probably long-term impacts if leases are issued adjacent or close to wilderness resources.

Under this alternative, impacts to cultural resources are mixed. Positive effects will result from Chaco Outlier management. Cultural resources could also be positively affected by acquisition of significant sites through land exchanges. Moderate to severe impacts to cultural resource sites could increase with development and ORV use.

The lands issue has the potential for a negative impact to paleo resources. Of the other issues identified, the lack of SMAs which protect paleo values would be a negative impact.

of habitat are identified for acquisition. Important bald eagle winter roosts would be protected. A sensitive plant HMP would be developed for the Resource Area. A total of 27,490 acres of threatened or endangered species habitat would have off-the-road vehicular travel limitations. These actions should improve wildlife resources in the FRA.

There are positive, short- and long-term effects for wilderness resources under the lands issue. The coal issue could pose adverse effects to wilderness resources depending on which tracts are eventually leased and developed.

Cultural resources would have a long-term, positive effect. Protection and management of significant cultural resource sites would be more balanced with prehistoric and historic occupations represented in the management spectrum. Not carrying forward the La Plata Valley SMA could result in negative impacts to resources; however, two Chaco outliers and the East Side Rincon Site, located in this valley, would be protected through SMA designation. Exchange or sale of Canada Larga area will transfer an area of high site density out of BLM administrative control. Limiting or closing SMAs to ORV use results in beneficial effects to specific areas with high cultural resource values. Potential adverse impacts could occur on a site-specific basis in "open" areas if off-the-road vehicular travel results in damage to sites or structures.

Of the issues identified, SMAs which protect important paleontological type localities would result in the greatest positive impact to paleo resources.

TABLE 3-14 (Continued): ENVIRONMENTAL CONSEQUENCES ANTICIPATED PER ALTERNATIVE

OUTDOOR RECREATION

Selection of Alternative A would have adverse impacts on outdoor recreation resources. Short- and long-term negative impacts are readily observable on non-motorized types of recreation and opportunities relying on a predominantly natural environment.

Selection of Alternative B would result in overall positive effects on outdoor recreation resources. Potential adverse impacts may be caused as a result of resolving the coal leasing suitability assessment issue. Acquisition of the lands around the Wilderness Areas, the WSA and the Fossil Forest would improve overall recreation opportunities.

Selection of Alternative C would carry forth overall adverse impacts on outdoor recreation resources. Potential adverse impacts may be caused as a result of resolving the coal leasing suitability assessment issue. Short- and long-term positive effects would result in the identification of two SMAs and a trail system managed for vehicular use.

There would be an overall positive effect on outdoor recreation resources. Potential adverse impacts may be caused as a result of resolving the coal leasing suitability assessment issue. Short- and long-term benefits would result by designating two off-the-road motorized vehicle areas and a trail system as well as designating other SMAs.

SOCIAL & ECONOMIC CONDITIONS

As a consequence of land ownership adjustments, short-term economic impacts will result from reduced tax revenues but not at significant levels. Other issues are not expected to have significant social or economic short-term or long-term impacts.

Although almost every issue would generate some social and economic consequences under this alternative, none of the economic consequences would be significant. The social consequences are somewhat harder to evaluate because they are difficult to quantify. However, the land ownership adjustment, coal leasing suitability and vegetative uses issues have the potential of arousing social concerns among the Navajo people.

The consequences of vegetative use adjustments could result in rather severe short-term social concerns that would become less severe with time but may last for years.

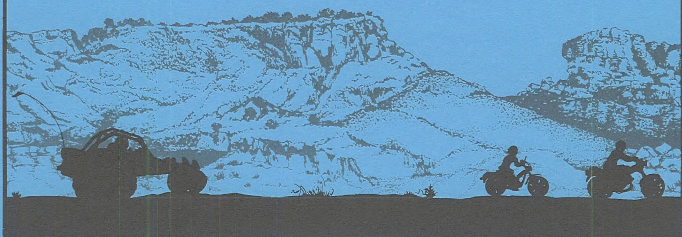
Although nearly every issue would have some social and economic consequences, none of the economic consequences would be significant. The social consequences are somewhat harder to evaluate because they are difficult to quantify. However, the land ownership adjustment, coal leasing suitability and perhaps SMA issues have the potential for arousing social concerns among the Navajo people.

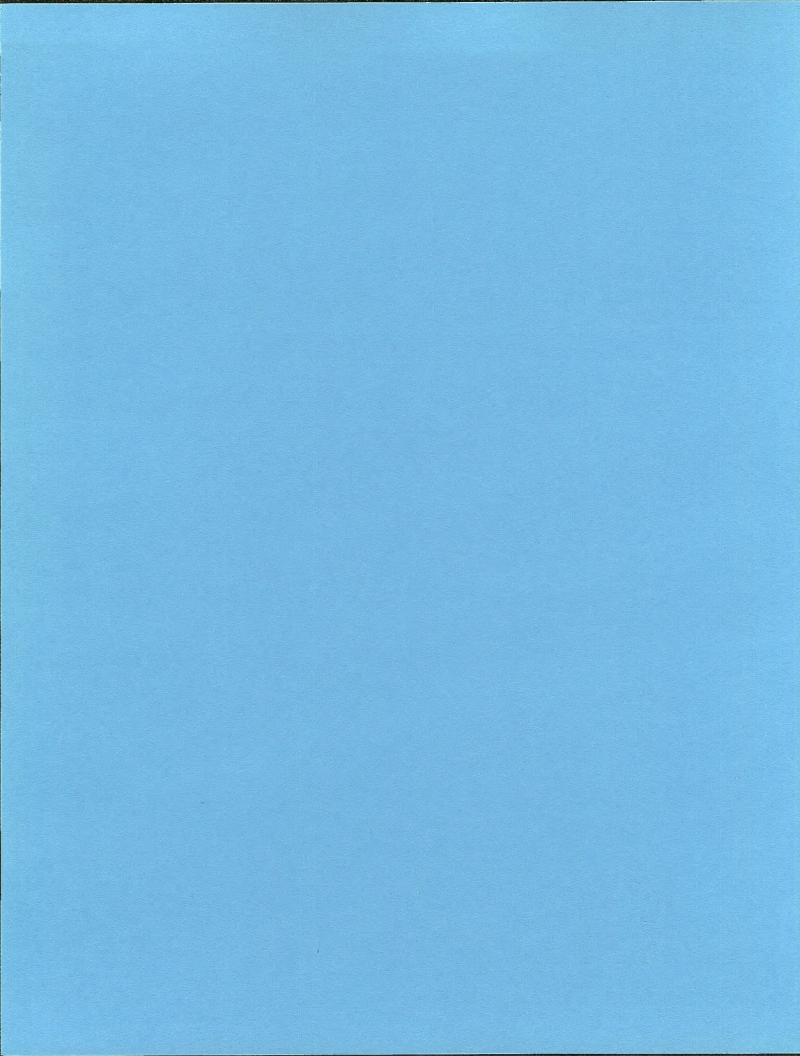
Although nearly every issue would have some social and economic consequences, none of the economic consequences are believed to be significant. The social consequences are somewhat harder to evaluate because they are difficult to quantify. However, the land ownership adjustment, coal leasing suitability, vegetative uses, and perhaps SMA issues have the potential of arousing social concerns among the Navajo people.



Consultation & Coordination

Chapter 4





CHAPTER 4

Consultation and Coordination

PROCEDURE

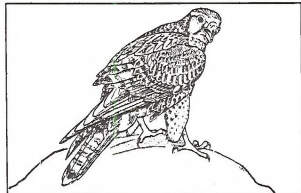
The Farmington Resource Management Plan /Environmental Impact Statement (RMP/EIS) was prepared by an interdisciplinary team of resource specialists from the BLM's Farmington Resource Area (FRA) and the Albuquerque District Office (see Table 4-1).

Writing of the RMP/EIS document itself began in 1985; however, preceding the writing phase a complex process of data gathering and other preparatory activities began in 1983 (Chaco Inventory Plan, pre-planning data gathering). This process included resource inventory, public participation, interagency coordination, and preparation of a Management Situa-

tion Analysis (MSA). The MSA is on file in the Farmington Resource Area office as is documentation of the public participation and interagency coordination. Consultation and coordination with agencies, organizations, and individuals occurred in a variety of ways throughout the planning process.

The initial sections of this chapter are devoted to consultation and coordination activities carried out during the preparation of this Draft Resource Management Plan. Comments and responses are included in this chapter.

During the planning process, formal and informal efforts have been made to involve the public, other federal agencies, and state and local governments. Several points of public involvement are mandated and were complied with.



RECORD OF DECISION

The Farmington RMP will be approved no earlier than thirty days after publication by the EPA of the notice of receipt of the Proposed RMP and Final EIS in the Federal Register. Approval of the plan will be documented in a Record of Decision which will be available for public review. Approval will be withheld on any portion of the plan protested until final action has been completed on the protests.

TABLE 4-1: LIST OF PREPARERS

NAME	RMP RESPONSIBILITY	EDUCATION	EXPERIENCE
Barbara am Ende	Paleontology	BS - Geology - Univ. of Iowa MS - Geology Northern Arizona University	BLM - 1 year - Paleontologist
Dan Armstrong	Fire	BA - Wildlife Management Humbolt State College, CA	BLM - 17 years - Fire Management Specialist
LouAnn Jacobson Ball	Cultural Resources	BA - Anthropology MA - Anthropology University of New Mexico	BLM - 5 years - Archeologist National Park Service - 3 years
4-2- Doug Burger	Team Leader (Through Draft)	BS - Wildlife Management Texas Tech University	BLM - 8 years - Realty Specialist - Supervisory Natural Resource Specialist
Michael Candelaria	Technical Coordinator - Range, Soils, Hydrology Writer - Rangeland, Livestock Grazing	BS - Wildlife Science MS - Wildlife Science New Mexico State University	BLM - 5.5 years - - Range Conservationist - Soil Conservationist LGL Ecological Research - 1.5 years - Terrestrial Ecologist
Jack Dossett	Forestry	BS - Oklahoma State University	BLM - 24 years - Forest Management
Mike Fisher	Fire	BS - Forest Management Colorado State University	BLM - 10 years - Fire Specialist USFS - 5 years
Lindell Greer	Lands	BS - Agriculture/Range Lincoln University Jefferson City, Missouri	BLM - 8 years - Range Conservationist - Natural Resource Specialist - Realty Specialist

TABLE 4-1 (Continued): LIST OF PREPARERS

NAME	RMP RESPONSIBILITY	EDUCATION	EXPERIENCE
Kent Hamilton	Socio-Economics	BS - Agricultural Economics Utah State University	BLM - 9 years - Regional Economist BIA - 15.5 years - Economist
Steve Hamp	Water Resources	BS - Geology Illinois State University MS - Hydrology University of Arizona	BLM - 7 years
Steve Henke	Coordination/Review, Range Resources	BS - Range Science New Mexico State University	BLM - 10 years - Range Conservationist - Supervisory Range Conservationist
Kathy Ollom	Word Processing Layout Assistant	HS - Clovis, New Mexico	BLM - 4 years - Admin. Clerk DOD - 4 years
Bill Overbaugh	Team Leader Technical Coordinator - Physical & Human Resources Writer - Outdoor Recreation	BS - Natural Resources University of Michigan MA - Outdoor Recreation University of New Mexico	BLM - 5 years - Outdoor Recreation Planner - Supv. Environmental Protection Specialist
Marcia Petta	Wilderness	BS - University of Oklahoma MS - Geosciences University of Arizona	BLM - 3 years - Wilderness Coordinator MMS - 1 year - Env. Scientist USGS - 3 years - Geologist BIA & NPS - 2 years
James M. Ramakka	Technical Coordinator - Minerals, Lands, Forestry, Wildlife Writer - Threatened & Endangered Species, Wildlife	BS - Wildlife Science Cornell University MS - Wildlife Management University of Maine	BLM - 8.5 years - Wildlife Biologist Instructor, Environmental Technology - 2 years Peace Corps - 2 years

TABLE 4-1 (Continued): LIST OF PREPARERS

NAME	RMP RESPONSIBILITY	EDUCATION	EXPERIENCE
Dennis Umshler	Coal	BS, MS - Geology New Mexico Tech	BLM - 3 years - Supervisory Geologist MMS - 1 year - Supervisory Geologist USGS - 7 years - Geologist
Harold G. Wall	Soils	BS - Forest Management MS - Forest Soils University of Idaho	BLM - 9 years - District Soil Scientist
Marilu Waybourn	Writer/Editor	AA - Radio Communications Stephens College, Columbia, Mo.	BLM - 2 years - Writer/Editor Public Relations - 4 years Newspaper Production - 14 years
Carl Yost	Minerals	BA - English University of Nevada, Reno BA, MS - Geology Eastern Washington State College	BLM - 3 years - Solid Minerals MMS - 1 year - Resource Evaluation USGS - 4 years Industry - 3 years

SUPPORT STAFF

Bob Bewley - GIS Coordinator
 Myrna Finke - Graphics
 Emilio Montoya - Cartography
 Rudy Romero - Cartography, Base Map
 Carl Sweeden - Digitizing

Connie Howell - Word Processing
 Carol Higgins - Word Processing
 Marie Gray - Typing
 Monica Chavez - Typing

PROTEST PROCESS

Any person who participated in the planning process and has an interest that is or may be adversely affected by approval of the Proposed RMP may file a written protest with the Director of the BLM within 30 days of the date the EPA publishes the notice of receipt of the Proposed RMP and Final EIS in the Federal Register.

Persons who participated in the planning process may file written protests with the Director of the BLM in Washington, D.C.

The protest must contain the name, mailing address, telephone number, and interest of the person filing the protest; a statement of the issues being protested, raising only those issues that were submitted for the record during the planning process; a statement of the parts of the plan being protested; copies of all documents addressing the issues submitted during the planning process by the protesting party, or an indication of the date the issues were discussed for the record; and a concise statement explaining why the State Director's decision is believed to be wrong. Any protests must be sent to the Director of the BLM at the following address:

Director (760)
Department of the Interior
Bureau of Land Management
Room 909, Premier Bldg.
18th and C Streets, NW
Washington, D.C. 20240

The Director will render a prompt written decision on the protest, setting forth the reasons for the decision. The decision will be sent to the protesting party by certified mail and will be the final decision of the Department of the Interior.

FORMAL CONSULTATION

Consultation with the U.S. Fish and Wildlife Service (USFWS) is required prior to initiation of any project by BLM that may affect any federally listed

threatened or endangered species or its habitat. Consultation is required by Section 7 of the Endangered Species Act of 1973. This RMP/EIS is considered a major project, and formal consultation has been initiated. Letters of formal consultation are on file.

The N.M. Department of Game and Fish and the N.M. Natural Resources Department have been contacted in regard to state listed threatened or endangered wildlife and plant species. This plan is consistent with legislation protecting state listed species. Coordination and consultation with the state will be continued throughout the planning process and during implementation of the plan.

The BLM cultural resource management program operates in accordance with 36 Code of Federal Regulations (CFR), Part 800, which provides specific procedures for consultation between the BLM and the State Historic Preservation Office (SHPO). Memorandum of Agreement (MOA) NMSO-168 between the SHPO, Advisory Council on Historic Preservation and the BLM New Mexico State Office became effective October 19, 1982. This MOA incorporates procedures for exchanging information with the SHPO concerning cultural resources on public and private lands. It defines activities requiring consultation and establishes reporting standards. Similarly, the Programmatic Memorandum of Agreement for the protection of cultural resources under the federal coal management program establishes procedures and focuses on measures that protect the types of sites usually found on federal land. The SHPO has been consulted during the development of the Draft RMP/EIS.

In compliance with Section 8 of the Public Rangelands Improvement Act of 1978, all permittees and lessees in the vegetative uses issue area have been contacted to initiate the required consultation, coordination, and cooperation process. Allottees were contacted by letter and informed of the selective management category assigned to the allotment and the implications of this designation. Consultation meetings with allottees were scheduled at their request.

Preplanning efforts for the Farmington RMP included correspondence, informal consultations, and meetings with livestock grazing permittees to establish range inventory procedures and to initiate selective management categorization. The April 1986 newsletter explained allotment categorization.

• CONSISTENCY WITH OTHER PLANS

The BLM's planning regulations require that Resource Management Plans be "consistent with officially approved or adopted resource related plans, and the policies and procedures contained therein, of other federal agencies, state and local governments, and Indian tribes, so long as the guidance and resource management plans are also consistent with the purposes, policies and programs of federal laws and regulations applicable to public lands..." (43 CFR 1610.3-2). In order to ensure such consistency, finalized plans were solicited from federal, state, and local agencies and groups as well as Tribal governments. These same agencies and groups will receive copies of the Proposed RMP/Final EIS.

There are no known inconsistencies between the Proposed RMP and officially approved and adopted resource related plans of other federal agencies, state and local governments, and Indian tribes

PUBLIC INVOLVEMENT

Public participation in the Farmington RMP is a dynamic process occurring throughout the development of the plan and beyond. In addition to formal public participation steps, informal contacts occur frequently with public land users and interested persons through meetings, field trips, telephone calls or letters. All applicable public participation is documented and analyzed in the planning process and kept on file.

*There are no known
inconsistencies between the
Proposed RMP and any
officially approved and adopted
resource plans.*

A notice was published in the Federal Register on May 16, 1985, announcing the formal start of the planning process. A second notice, requesting coal and other resource information, was published in the Federal Register on May 23, 1985.

On May 21, 1985, 1,500 letters were mailed detailing the time and place for public meetings and the intent to develop the Farmington Resource Area

Resource Management Plan. The purpose of the mailing was to identify major issues in the FRA and to invite the public to five public meetings. The letter requested public participation. Meeting notices were also in local newspapers and announced on several radio stations. The public meetings were held in mid-1985 to develop issues and planning criteria. The meetings were conducted with Navajo interpretation.

Responses received from the meeting attendees and those returned by mail helped solidify the RMP issues and focus the planning analysis on the unresolved land use allocation questions.

Newsletters outlining the planning process, along with response forms for input on RMP issues, were mailed to a list of over 1,000 names in September 1985. A preliminary list of issues, together with planning criteria, was examined in the newsletter. A 40-day response period was set for interested persons to comment on the proposed planning issues and criteria.

After the final issues were identified, they were incorporated in a second newsletter and 1,100 copies were mailed in April 1986 to an updated list of other agencies, businesses, organizations, grazing allottees, and individuals interested in management of the public lands in the FRA. Several changes were made as a result of response from the public to the first newsletter.

In August 1986 over 1,000 flyers were mailed to all addresses on the RMP mailing list with instructions to return the flyer if the party wished to remain on the mailing list and receive the Draft RMP/EIS.

As a result of the response to the flyer, the number of copies of the Draft RMP/EIS mailed out was reduced to 650. Over 300 additional copies have been distributed since the mailing date of Feb. 26, 1987.

The 90-day comment period for the Draft RMP began March 3 and ended June 3, 1987. A notice of availability was published in the Federal Register on March 2, 1987. In addition, public hearings were held in Grants, Crownpoint, Farmington and Cuba to provide an opportunity for the public to present oral comments. The public was notified about the hearings in the Federal Register, local newspapers, and on radio and television. Pertinent portions of the public hearings are reprinted in this chapter. Com-

plete transcripts are available for public inspection at the Farmington Resource Area office, 900 La Plata Highway, Farmington, NM.

The four public hearings were held in May 1987. The hearings, summarized in Table 4-2, were conducted with a Navajo interpreter. The table also depicts the number attending and the number who testified.

The public hearings (Grants, Crownpoint, Farmington and Cuba) were conducted with the aid of a Navajo interpreter.

TABLE 4-2: PUBLIC HEARING SUMMARY

Location	Date	No. Attend	No. Testify
Grants	May 4	6	0
Crownpoint	May 5	83	23
Farmington	May 6	33	5
Cuba	May 7	16	5

Table 4-3 is a partial listing of various federal, state and local agencies, organizations and individuals who provided input during preparation of the Draft and to which the Proposed RMP/Final EIS is being sent.

Informal coordination with the public has taken place throughout the planning process through personal contacts, phone calls, and letters.

• CONTINUING PUBLIC PARTICIPATION

The Farmington Resource Area intends to prepare an RMP summary update each year. The purpose of this summary is to inform the public of the progress made in implementing the RMP. The summary will also describe activity plans to be prepared during the following year so interested members of the public can request copies and comment. The Bureau of Land Management hopes this venture will enable the public to be involved in the specific land management actions resulting from implementation of this RMP. An approved Final RMP is scheduled to be prepared and released for public review in 1988.

• COMMENT ANALYSIS

In addition to the oral testimony at the public hearings, 44 comment letters were received and are reprinted intact.

All letters and oral presentations were reviewed to determine whether they met the required criterion for response (i.e., discussion of the adequacy of the draft document.) Substantive comments, those presenting new data or questioning facts or analyses, were fully evaluated and given responses which are printed beside each letter.

Each separate comment pertaining to the adequacy of the Draft RMP/EIS has been identified with a code number (i.e. L15 or T20). Responses beginning with "L" refer to letters and with "T" relate to the transcripts. The BLM responses are keyed to these code numbers.

The transcripts are not reprinted intact. Only the portions with substantive comments which required response are printed. Complete transcripts are on file at the Farmington Resource Area Office, 900 La Plata Highway, Farmington, New Mexico.

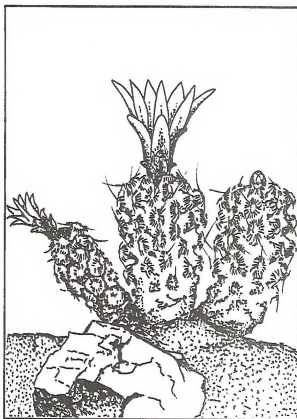


TABLE 4-3: PARTIAL DISTRIBUTION LIST

FEDERAL GOVERNMENT

Department of Agriculture
Soil Conservation Service
U.S. Forest Service
Department of the Army Corps of Engineers
Department of the Interior
Bureau of Indian Affairs
Bureau of Reclamation
National Park Service
Office of Surface Mining,
Reclamation & Enforcement
U.S. Fish & Wildlife Service
Department of Energy
Federal Energy Regulations Commission
Environmental Compliance
Department of Justice
Department of Labor Mine Safety
Environmental Protection Agency

STATE GOVERNMENT

Bureau of Mines & Mineral Resources
Department of Finance & Administration
Planning Division
Coordination/Clearinghouse Bureau
Historic Preservation Bureau
State Historic Preservation Officer
Energy & Minerals Department
Mining & Minerals Division
Forestry Department
Governor of New Mexico
Health & Environmental Department
Environmental Improvement Division
Labor Commission
Land Office
Natural Resources Department
Department of Game & Fish
Department of Parks & Recreation
State Engineer
Congressional Delegation
Heritage Program
Attorney General
Farm & Livestock Bureau
Soil & Water Conservation Division
Department of Agriculture

MAYORS

Cities of: Aztec, Bloomfield, Farmington,
Grants, Cuba, Gallup, Village of Jemez Springs

**CITY & COUNTY COMMISSIONS
& PLANNING COMMISSIONS**

Aztec, Bloomfield, Farmington, Gallup
McKinley County
Sandoval County
San Juan County
Rio Arriba County

SPECIAL INTEREST GROUPS

San Juan County Land Users Assn.
San Juan Cyclists
Natural Resources Defense Council
Native Plant Society of New Mexico
New Mexico Cactus & Succulent Society
New Mexico Archeological Council
Bloomfield Kiwanis Club
Nature Conservancy
Wilderness Society, Southwest Region
Sierra Club, Rio Grande Chapter
American Motorcycle Association
The Desert Protective Council
New Mexico Museum of Natural History
New Mexico Mountain Club
Southwest Research & Information
New Mexico Wilderness Coalition
N.Mexico Citizens for Clean Air & Water

TRIBAL GOVERNMENT

Jicarilla Apache Tribe
Ute Mountain Tribe Planning Department
Jemez Pueblo
Zia Pueblo
Zuni Tribe
Navajo Tribe
Land Development/Operations
Planning Department
Real Property Management
Natural Resources Department
Fish & Wildlife Department
Chapter Development Department
Branch of Forestry
Environmental Quality
DNA Legal Services
Eastern Navajo Land Office
Justice Department

TABLE 4-3 (Continued): PARTIAL DISTRIBUTION LIST

NAVAJO TRIBE (Cont.)

District 15 Land Board
District 16 Land Board
District 19 Land Board
District 20 Land Board
District 21 Land Board
District 23 Land Board
Health Board
Joint Land Board
Navajo Nation
Navajo Nation Coal Department
Tribal Chairman
Tribal Vicechairman
Tribal Chapter Manager
Navajo Community College Library
Navajo Times
Canoncito Chapter
Chichiltah Chapter
Counselor Chapter
Baca Chapter
Casamero Lake Chapter
Gallup Chapter
Church Rock Chapter
Crownpoint Chapter
Dalton Pass Chapter
Yanbito Chapter
Becenti Chapter

NAVAJO TRIBE (Cont.)

Ft. Wingate Chapter
Huerfano Chapter
Lake Valley Chapter
Nageezi Chapter
Ojo Encino Chapter
Pueblo Pintado Chapter
Thoreau Chapter
Whitehorse Lake Chapter
Manuelito Chapter
Ramah Chapter
Smith Lake Chapter
Torreon Chapter
Little Water Chapter
Mariano Lake Chapter
Pinedale Chapter
Red Rock Chapter
Rock Springs Chapter
Standing Rock Chapter
White Rock Chapter
Navajo Coal Commission
Navajo/Hopi Taskforce
Office of Indian Affairs
Tribal Archeologists
Council of Energy Resources - Tribes
Native American Resources Library

Figure 4-1 depicts the overall response to the plan as reflected in the letters received during the formal comment period. Of these 40 letters, 19 (47.5%) indicated no stated preference, 7 (17.5%) were in favor of Alternative D – the preferred alternative, 10 (25%) were for Alternative D with reservations, 2 (5%) were opposed to Alternative D, and 2 (5%) were opposed to Alternative D with reservations.

Four letters were received after the close of the comment period. Responses to these letters are in the document, but not analyzed in Figure 4-1 or in Table 4-4. Table 4-4 illustrates the breakdown of the substantive comments from letters and transcripts.

FIGURE 4-1 LEGEND:

- N = No stated preference
- F = For Alternative D
- + = For Alternative D with reservations
- O = Opposed to Alternative D
- = Opposed to Alternative D with reservations

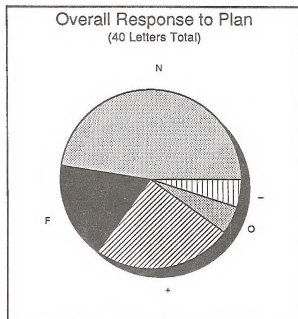


FIGURE 4-1

TABLE 4-4: SURVEY OF PUBLIC RESPONSE TO PLAN

[illegible]

Note: No testimony was given during the first public hearing.

N = No stated preference

F = For Alternative D

+ = For Alternative D with Reservations

0 = Opposed to Alternative D

— = Opposed to Alternative D with Reservations

RESPONSES TO LETTERS AND TESTIMONY

This section contains the comments and responses to letters and to testimony presented during public hearings.

The 44 comment letters are reprinted in full followed by the pertinent portions of the public hearing transcripts. Page numbers appearing in specific responses to comments refer to the Draft RMP.

In addition to specific responses to substantive comments, a number of similar comments from both formal letters and public hearing testimony were received which indicated confusion on certain issues. Therefore, a general response is provided in this section to clarify points concerning land ownership adjustments, coal leasing suitability assessment, vegetative uses (livestock reduction), off-road vehicle designations, and Navajo Tribe representation.

• General Response to Comments on Land Ownership Adjustments

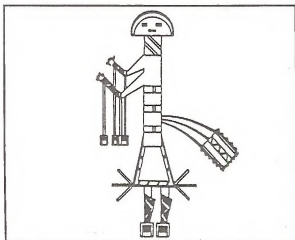
The majority of responses to the proposed resolution of this issue were concerned with the problems that might be caused by the creation of additional split estate lands and the disposition of scattered tracts in the checkerboard area.

***Long-term benefits to be gained
by consolidation of public land
outweigh the increased
short-term difficulties.***

The BLM is acutely aware of the problems which can occur when federal minerals are located under non-public surface. However, the long term benefits to be gained by the consolidation of public land ownership outweigh the increased short-term difficulties resulting from the creation of additional split estate. In addition, the RMP does not preclude the possibility of joint surface/mineral exchange, provided such an exchange results in a net benefit to the public.

Section 209 of FLPMA requires, for all sales, that the United States reserve mineral rights, unless:

- 1) there are no known mineral values in the land, or
 - 2) the reservation of the mineral rights interferes with or precludes appropriate non-mineral development of the land and that such development is a more beneficial use of the land than mineral development.
- Before BLM considers an application for sale of the mineral rights, the applicant must conduct or pay the Federal government to conduct an exploratory program to determine the character of the mineral deposits and evaluate the fair market value of the mineral interests to be conveyed. The BLM also



prepares a mineral report on all proposed sales and exchanges to determine known mineral values and to search the record for classifications of the land as having known mineral values (Known Geologic Structure, Known Recoverable Coal Resource Area, etc.). A mining claim of record under Section 314 of FLPMA prevents an exchange or sale unless the prospective patentee is willing to accept defeasible title, preserving whatever rights the mining claimant may have, and the land has no known mineral value; or 2) the Bureau examines the mining claim and it is found invalid.

Sections 203, 206 and 209 of FLPMA provide the rules by which the BLM must pursue surface and mineral exchanges and sales on public lands.

The DRMP proposal to identify a land exchange zone in the southern half of the Resource Area generated many comments asking why the BLM just did not give these lands to the Navajo Tribe or individual Navajo people. There was also obvious confusion indicating that some thought the plan included Reservation and Tribal Trust land as well as public land. The RMP applies only to the BLM-ad-

ministered public lands within the planning area. Analysis of conflicting legal claims to individual parcels is beyond the scope of this RMP. Until resolution of any claim is decided in court, the BLM must continue to treat disputed lands as public lands. Likewise the BLM cannot unilaterally give land to any individual or group. The Federal Land Policy and Management Act requires the BLM to receive equal value in payment or exchange for any public lands which are disposed of. Although a priority list of preferred methods of exchange to be pursued by the Bureau is identified, all reasonable exchange offers will be considered.

Comments were also voiced on relocation. The RMP does not propose any relocation of Navajos. Chances are pretty good that anyone occupying public lands will be able to stay on these lands if an exchange is undertaken. Other unoccupied tribal lands will be transferred to the Bureau for occupied parcels.

The RMP does not propose any relocation of Navajo people.

General Response to Comments on Coal Leasing Suitability Assessment

Several public comments indicated that there is still confusion as to the role of the RMP in the coal leasing process. This process is described in great detail in the San Juan River Regional Coal EIS (USDI, BLM 1984a) and other documents which are far too lengthy to be repeated in the RMP.

The RMP is a planning document, not a coal leasing document. It only screens and designates the suitability for potential leasing of those areas in which industry has expressed an interest. In this process the BLM is neither advocating nor opposing mining. The RMP examines alternatives presented by the existing management situation and the laws and regulations which control the coal leasing process as well as those for management of public lands and minerals. No coal leases have been issued, therefore, the process of bringing forward coal tracts for further consideration for leasing has no environmental consequences at this time. If anything, the RMP has had a beneficial impact to the grazing issue in terms of coal development, because the 39 tracts originally considered for leasing have

been reduced to 17 tracts whose development might impact grazing.

At the RMP stage of the planning process, any detailed analysis of actual site-specific impacts, such as those dealing with reclamation and potential disturbance to occupants, would be speculative and very likely futile. For actual leasing to occur, there must be a market for the coal. The field and economic situations, as well as mining and reclamation technology may change before leasing occurs.

The Navajo Tribe has selected about 35,000 acres of public lands under the Navajo/Hopi Relocation Settlement Act. This selection includes most of the strippable coal under federal ownership in the Fruitland formation within eighteen miles of the reservation boundary. Because of this, it is anticipated that the Navajos will control the scope and timing of federal and Indian coal development in the area.

Further screening of the tracts as well as detailed site specific environmental analysis will occur during activity planning. This is the next planning step prior to lease issuance and development of individual mine plans according to the Federal Register Notice 25795 July 1987 which states that a "final determination of the suitability of lands for mining is not made until the mine plan/permitting approval stage, not during the land-use planning stage."

General Response to Comments Concerning the Vegetative Uses

The BLM received several comments concerning impacts to livestock growers resulting from proposed grazing reductions and land ownership adjustments. The reductions, in particular, were viewed as being catastrophic to livestock growers on a regional as well as on an individual basis.

Of the public land acreage analyzed by the RMP, 88 percent was actually inventoried. Of the grazing allotments within the issue area covered by the RMP, four Section 3 allotments and 16 Section 15 allotments (a total of 19 percent of the allotments) would be affected by grazing reductions. On the remainder of the allotments no reductions in grazing are anticipated.

The effect of grazing reductions to individual livestock growers is minimal when the reductions are divided by the number of permittees/lessees for an af-

fected allotment. For example, the Kimbeto Community allotment, with a proposed reduction of 1,254 AUMs, has 82 permittees. The average reduction per individual permittee would be 15 AUMs. As another example, the Counselor Community allotment, with a proposed 3,117 AUM reduction and 66 permittees, results in a 47 AUM reduction for each individual. The other affected allotments exhibit similar results.

Due to private party agreements, loss of grazing privileges does not typically occur when lands are exchanged or sold.

Concerns were expressed about loss of grazing if the public lands are sold or exchanged. Due to private party agreements, loss of grazing privileges does not typically occur when lands are exchanged or sold. If the lands are offered for exchange to other land management agencies, the impacts would be mitigated if these agencies continued to grant live-stock grazing use to the allottees. If lands are offered for competitive sale, affected allottees would have the option of purchasing the public lands in their allotments.

The above wording is found in the analysis of impacts in Alternative D and similar wording is found in Alternatives B and C of the Draft RMP.

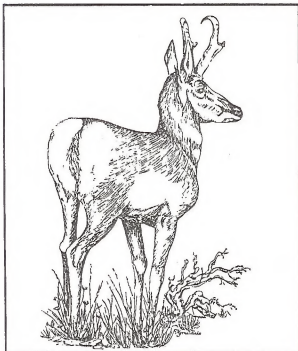
• General Response to Comments on ORV Designations

Numerous comments were received questioning the Farmington Resource Area's strategy in designation of public lands for ORV use. While the Bureau agrees with the comments focusing on probable destructive affects of indiscriminate use of ORVs, the agency must also recognize the very real problems associated with enforcement of vast areas with limited manpower.

Most comments are not geographically based or supported by facts demonstrating that a specific action is warranted. In the absence of this, the comments are one of personal preference and emotion and lack geographic focus by which a response could be given. In light of this, management strategies consider the present landscape character, the abundance

of roads within localized areas, the present magnitude of ORV use including but not limited to, recreational ORV use, and finally areas where critical problems and use conflicts with good land management. These considerations are factored together to address the real need and the agency's capability to effectively administer these broad areas.

While this may seem to compromise the natural values or place them in jeopardy, respondents must recognize that these designations are "administrative." An active part of the ORV Management Program is to monitor use and determine when areas are changing to unacceptable levels of use. When unfavorable situations occur, the Area Manager will take steps to regulate use which will be a combination of amending the previous designation to a more restrictive category and enforce use in the area until the use is properly administered. This may seem after-the-fact management but in the realm of land management, it becomes prudent to know actual use and match the management accordingly. Key in this process is the public involvement in the monitoring process. ORV advocates will need to police themselves since failure to do so will result in a loss of open lands in which to pursue their recreational activities. The environmental community, as well, will be watching to see that lands are being appropriately monitored. When circumstances that warrant an administrative action occur, BLM will respond to alleviate the problem.



Nearly all motorized vehicle use in the FRA can be described as off-highway. This basically means that vehicles use existing roads and do not travel off-road extensively. Only incidental off-the-road vehicular use is known to take place in the FRA. Exceptions include intensive ORV recreational use in localized areas near population centers and near highways. Some off-the-road vehicle travel occurs with activities such as oil and gas exploration as well as other activities including big game hunting and ranching. Impacts are mostly confined to localized areas adjacent to population centers. Consequently, these impacts are often on private lands.

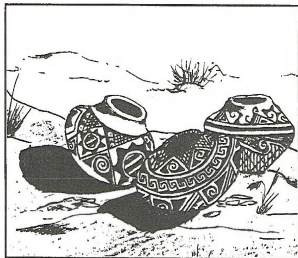
An estimated 10,000-mile road network in the FRA, coupled with future road construction associated with mineral development, ensures access to most destinations on-road. The soil types, terrain, distance from major population centers and the lack of convenience facilities are not conducive to attracting widespread ORV recreational use. The management strategy is to provide areas where concentrated use can be closely monitored and lessen the widespread unregulated use by those recreationists who wish to partake in competitive use of rugged terrain. This localized use will be evaluated to assure that impacts do not further affect resources.

An estimated 10,000-mile road network in the Farmington Resource Area ensures access to most destinations on-road.

The "open" designation has been a source of confusion. For example, the Dunes SMA is designated to promote the area primarily for ORV use. The "ORV" designation in the majority of the resource area, while not restricting vehicle travel, is not expected to attract ORV users nor will it be promoted as such. Educational signs will be strategically placed within this "open" designation informing visitors of the effects of irresponsible off-road travel without unduly restricting use of public lands.

In brief, designations have been proposed to achieve policy direction, protect resources, reduce user conflicts, enhance public safety, meet public demand and minimize conflicts on adjacent lands. The designations are capable of being effectively implemented in order to enforce regulations and the

strategy proposed is designed for flexibility to adjust to changing field conditions in the future. Monitoring of ORV designations will begin upon approval of the Final RMP. An annual summary report will revisit the situation regarding the progress of implementing ORV designations, changes in designation status and the efforts of the education and signing program.



• **General Response to Comments From Navajo Tribe Representatives**

A number of comments received from the Bureau of Indian Affairs Eastern Navajo Agency, DNA-People's Legal Services Inc. and Nordhaus, Haltom, Taylor, Taradash and Frye, Attorneys at Law, question the basic premise of the Farmington RMP. The premise is that land use planning must be completed for all BLM-administered public lands in the Farmington Resource Area. The question concerns the land status in the checkerboard area which concerns the debate on rights of aboriginal claim vs. public land status. The RMP completes land use planning for what is currently recognized as public domain and also recognizes the differences in opinion for the record. The opinions and interpretations contained in many comments have been highly debated and disputed for years. These opinions and their resolutions fall beyond the scope of land-use planning, however, all parties are currently pursuing a cooperative land adjustment through a tri-party agreement.

Specific responses are now given to the comments from letters and hearing transcripts.



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Ecological Services
Suite D, 3530 Pan American Highway NE
Albuquerque, New Mexico 87107

Cons. #2-22-86-I-139

1

March 12, 1987

Memorandum

To: Area Manager, Bureau of Land Management,
Farmington Resource Area, Farmington, New Mexico

From: Field Supervisor, FWS, Ecological Services,
Albuquerque, New Mexico

Subject: Threatened and Endangered Species Consultation Request,
Draft Farmington Resource Management Plan, New Mexico
(BLM)

L1 [We have received your request for Section 7 consultation on the Draft Farmington Resource Management Plan. Because you have determined that the proposed action would have no effect or a positive effect on Federally listed species, no further consultation under Section 7 of the Endangered Species Act is necessary. We appreciate your efforts to conserve Federally listed species.

L1: Comment noted.

John C. Peterson

cc:
Regional Director, FWS, FWE, Albuquerque, New Mexico

ROBERT L. BAYLESS

PETROLEUM PLAZA BUILDING
P.O. BOX 186
FARMINGTON, NEW MEXICO 87499
(505) 328-2859

March 19, 1987

Bureau of Land Management
Caller Service 4104
Farmington, NM 87499

ATTN: Mr. Doug Burger

RE: Farmington Lands Exchange

Dear Doug:

Under the proposed exchange whereby surface rights will reside in the Navajo Tribe while mineral rights remain with the United States of America there is a real danger of future problems.

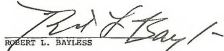
This situation is somewhat analogous to the federal lands under the Navajo Irrigation Project where the obtaining of easements for drilling and production of oil and gas is greatly hampered by the difficulty in working with the Navajo Tribe. The Tribe has no incentive in cooperating on said easements and this adversely impacts the value of the USA mineral rights as producers recognize the delays and costs involved in developing the mineral rights. Obviously, this in turn is reflected in the bonus values when new leases are sold.

It seems only prudent to, at a minimum, build into the exchange agreement rights of access and transportation for oil and gas exploration and production.

Another matter of concern is the possibility of taxation by the Navajo Tribe on oil and gas production on the exchange lands in addition to the normal State of New Mexico taxes. If this were to occur it would obviously impact the values of the USA mineral rights.

Your response to these concerns will be appreciated.

Yours truly,


ROBERT L. BAYLESS

RLB/eh

L2: Rights of ingress and egress to occupy and use the surface necessary to produce from federal leases already exist in the law.

L3: The state does not charge a severance tax on Indian tribal lands. On Indian surface/federal minerals, the tribe could not tax the minerals produced, although they might charge a surface use fee. The state could levy a severance tax on the federal minerals in this case, but there should be no way an operator could be taxed twice.



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
NEW MEXICO DIVISION
P.O. BOX 1650
117 U.S. COURT HOUSE
SANTA FE, NEW MEXICO 87504-1650
REGION SIX

3

March 23, 1987

BY REPLY REFER TO

HPD-NM

SUBJECT: Farmington Resource Management Plan

Mr. Ron Fellows
Farmington Resource Area Manager
Bureau of Land Management
Caller Service 4104
Farmington, New Mexico 87499-4104

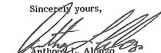
Dear Mr. Fellows:

L4 [The subject plan has been reviewed by this office. We have no comments to offer at this time.

L4: Comment noted.

Thank you for the opportunity to review and comment on your proposal.

Sincerely yours,



Anthony L. Alonzo
Division Administrator

L. Paul Applegate
Albuquerque District Manager
435 Montano Road, NE
Albuquerque, NM 87107

Dear Mr. Applegate:

I would like to pass along my appreciation for the information provided to the association by your staff in the Farmington Resource Area at our meeting March 18. Doug Burger gave an outstanding summary of the land ownership adjustment issue in the Resource Management Plan. We enjoyed meeting Ron Fellows and look forward to working with him.

The association passed two resolution which may interest you. As a group we support the concept of designating the Albuquerque District of the BLM as a Sikes Act area. We feel the recreational users of the public lands ought to contribute to the management and improvement in the same manner as livestock producers due through grazing fees.

After reviewing the RMP, the association supports the preferred alternative and recommend it as the best option to obtain a balanced mix of Resource Management.

L.S: Comment noted.

Thanks again for your assistance.

Sincerely,



Pat Montoya
President, San Juan Basin
Livestock Association



United States Department of the Interior

BUREAU OF MINES

P. O. BOX 25086
BUILDING 26, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

5

Intermountain Field Operations Center

March 27, 1987

Memorandum

To: RMP Team Leader, Bureau of Land Management, Farmington Resource Area, Caller Service 4104, Farmington, New Mexico 87499

From: Chief, Intermountain Field Operations Center

Subject: Draft Farmington Resource Management Plan

As requested by Ron Fellows, Farmington Resource Area Manager, personnel of the Bureau of Mines, Intermountain Field Operations Center, have reviewed the subject draft Resource Management Plan (RMP) for potential impacts to mineral resources and mineral development. Mineral resources occurring in the Farmington Management Area are adequately addressed by the draft plan and include uranium, coal, petroleum and natural gas, and several industrial minerals.

We commend the BLM for its policy "to minimize the amount of public land withdrawn, particularly from mining and mineral leasing, where applicable to replace existing withdrawals with rights-of-way, leases, permits, or cooperative agreements" (RMP p. 1-10). Creation of the Coal Belt Special Management Area (Alternatives C and D) to encourage leasing and development of Cretaceous Fruitland coals is a laudable effort to protect an important resource for future development. Several of the draft RMP alternatives, however, involve land exchange and sales which would create additional hardship for an already depressed mineral industry. Alternatives C and D, in particular, would propose the exchange or sale of 396,582 and 325,000 surface acres, respectively, an action which would impede mineral leasing on split estate lands and lead to de facto withdrawal of these lands for locatable minerals. The action could adversely affect future exploration and development, for example, of the Ambrosia and Smith Lake Districts as well as other parts of the Grants Uranium Region lying within the exchange/sale zone in southern McKinley County. The Grants Uranium Region, as the RMP notes, has produced more uranium than any other area of the world. Although the 1980's has witnessed a period of decline in the uranium industry, reserves and resources of the Ambrosia Lake and Smith Lake uranium districts are by no means exhausted, and high potential for future development of these resources remains.

LS: Comment noted.

LS

L7

In spite of the scattered nature of BLM ownership in the exchange/sale zones, we suggest that the BLM endeavor to retain both surface and mineral ownership for those areas that have had past mineral production or that have important future mineral development potential. We recommend that a study be made to identify BLM-owned areas in the proposed exchange/sale zones containing unpatented claims, existing mineral leases, and areas with known moderate to high leasable or locatable mineral potential. We further recommend that these identified areas be selectively retained under BLM management to avoid the adverse impact of split estate lands on future mineral exploration and development.


William Cochran

L7: Active mining claims and existing leases will not be disposed of. See also comment L2.

March 26, 1987

Mr. Ron Fellows
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Re: Comments on Farmington Resource Management Plan

Dear Mr. Fellows:

Page S-5 Alternative D (Resource Conservation) states:
"...Long term impacts to about two percent of the soil...
would occur from coal mining..."

Page S-5, Alternative C (Resource Production) states:
"...Long term impacts to less than one percent of the
soils would occur from coal mining..."

L8 [COMMENT: Even though it is less than a two percent difference,
how is it possible for there to be a long term impact on
more soils in the Conservation Alternative than the
Production Alternative? It should be the reverse, of
course.

Page I-6 states:
"...However, federal acreage within the retention zone
should not decrease significantly, and in fact should
increase."

L9 [COMMENT: The above statement is not consistent with any of the
stated Alternatives, which identify 98,945 acres for
Alternative B; 396,582 acres for Alternative C; and
324,940 acres for Alternative D as identified for disposal
(page I-43). Alternative B is the only plan close to the
stated goal, page I-6.

Page 3-19 Rangeland, states:
"Under this alternative, only 14 competitive coal leasing
tracts..."

L10 [COMMENT: Why use the word "only"? It is judgmental and
obviously biased toward coal leasing, indicating a
reluctance toward a limitation. The word has no place in
this management plan.

L8: The comment is correct; in Alternative B 12,251 acres could be affected and in Alternative C 14,003 acres could be affected. In both cases, this is less than one percent of the resource area soils and the text on S-5 and the summary on page 3-24 were revised to read "...less than one percent..."

L9: The acreages quoted for disposal in the exchange zone on page I-43 have no relationship to acres in the retention zone as quoted on page I-6. Federal acreage within the retention zone is not expected to decrease significantly from what currently exists because public lands are to be retained. However, the majority of public lands in the exchange zone are proposed for transfer from public ownership.

L10: The word "only" was meant to convey a sense of comparison between the levels of leasing recommended in the four plan alternatives. It was deleted from the final.

Page B-1, Special Management Areas:

I have spent considerable time in several of these areas--

Page B-8, Simon Canyon, states:

"An even-age stand of cottonwood trees is found at the bottom of the canyon..."-- also a quote from the Final 1984 Plan for Simon Canyon, page 7.

L11 COMMENT: There are, in fact, dozens of small trees under eight feet-- 3 species of cottonwood-- growing there as well. This growth has occurred since grazing was recently halted. Such new growth of riparian trees is also documented in Nature Conservancy areas in Arizona-- an indication that livestock grazing has a negative impact on riparian habitat.

L11: The habitat changes noted have occurred during the last 2 years as a result of implementation of portions of the Simon Canyon Recreation Area Management Plan.

Page B-16, Rattlesnake Canyon:

I have visited this site several times. My goals are to seek solitude, bird watch, enjoy the scenery and botany of the area. An unidentified accipiter hawk nested here in 1986. It is likely that gray vireos (listed as a state threatened or endangered species-- Group 2) also use the area. Other birds of particular interest there include black swift, Clark's nutcracker and Williamson's sapsucker.

Page B-16, Rattlesnake Canyon and Page B-84, Lybrook Fossil Area: Management Prescriptions (Plan A)

1. Complete "limited" ORV designation and implementation plan.

L12 COMMENT: Compare the above with Page 1-25, "5. Transportation: No new ORV 'closed' or 'limited' designations would be implemented through the RMP." --the above statements seem to contradict each other and require a resolution.

L12: Alternative A states that Rattlesnake Canyon and Lybrook Fossil Area as well as Red Rocks Bluff, Bohannon Canyon, Bisti/De-na-zin, Gobernador and Cereza Canyon SMAs are prescribed for either as "limited or closed" ORV designations as identified in Appendix B. Technically, the RMP would not implement any new ORV designations under Alternative A because it is the current management scenario under the direction of Management Framework Plans (refer to Draft Appendix A).

Page B-62, Reese Canyon:

L13 COMMENT: Reese Canyon has summering populations of gray vireo (a state threatened or endangered species - Group 2) and at least 2 accipiter species. The area has limited transition zone vegetation, much of which can be found to the west (Sections 13 and 14) of the present Reese Canyon proposed SMA and to the south (Sections 24 and 23) of Sections 13 and 14, including the highest "peaks" in the area, as well as much of the canyon bottom, whose vegetation includes several transition zone species, some of which was destroyed by a new road about 1980-81. The above sections should be added as an integral part of this SMA for their special botanical (some of which is identified in the FRNP) and zoological characteristics (none of which is even noted in the FRNP).

L13: The boundary of the RNA was that requested by the Nature Conservancy when they nominated this area as an RNA. At that time the BLM had no data, or public input that indicated this area was zoologically unique. Based on this comment and another from the Nature Conservancy (see comment L81) the boundaries of the RNA have been expanded. The monitoring and inventory prescription will include an element to monitor for gray vireos to determine if this area is more significant than any other in similar habitat.

L14 { Is any of the Pine River flood plain included in this SMA? If so, why is that BLM land adjacent to the flood plain not included as part of this SMA? -- or is it included as one of the "27. River Tract" SMA's?

L15 { I believe it will be wood cutting for commercial sale as well as home use which will in the near future jeopardize many of the resources in the FRMP. This is another reason for the designation of Rattlesnake Canyon as an ACEC and for the expansion of Reese Canyon RNA.

L16 { It does little good to state that there is no off-road vehicle damage (page 3-19, Rangeland) when a new road can legally destroy the very things for which the area would be designated as an RNA.

Page B-22, Glade Run Trail System

L17 { COMMENT: I feel this area can and should be legitimately included in Plan B (Resource Conservation) provided the management prescription is carried out as stated on page B-22.

Page B-52, Laguna Seca Mesa

L18 { COMMENT: I believe it is in this area just north of Forest Road (or BLM Road) 314 that there is presently a sign designating a Bald Eagle Winter Roost Area which is closed to access from November to March. I do not find this Bald Eagle Winter Roost Area on any of the maps included in this Farmington Resource Management Plan publication. Just what are the plans for this present winter roost site?

Page B-68, Bald Eagle Wintering Area

L19 { COMMENT: Similar to page B-52. Is the present Bald Eagle Winter Area on Laguna Seca not to be included in this SMA? It doesn't appear on any of the maps.

Page M-1, Summary of Allotment Conditions

L20 { COMMENT: Beginning with Allotment "6016 Lake Valley Community" page M-1, and following for nearly five pages the Ecological Condition Class Area is identified as "unknown" and asterisked as "no acreage is in excellent condition, and... none of the trends were toward an improvement." This indicates poor use/management of an area with fragile botanical resources. Adjustments must be made for improved range conditions.

L14: The land adjacent to the flood plain is Bureau of Reclamation land. The draft SMA map incorrectly delineates this land as managed by the BLM. Only public land is included in the RNA.

L15: Comment noted.

L16: Road construction is a part of standard operating procedure, requiring environmental analysis. Special values such as those contained in an RNA or ACEC are considered and impacts analyzed and, if necessary, mitigated before construction is allowed.

L17: Because ORV activity is considered a consumptive land-use program rather than conservation-oriented, it was considered under the Production Alternative C and was not a consideration under the Conservation Alternative B.

L18: There is no eagle roost in the area described. The area is seasonally closed to protect wintering big game populations. Eagles use this upland area to forage for winter-killed big game and though no roosts have been found, repeated sightings of eagles confirms their importance in the ponderosa pine/gambel oak habitat type of Laguna Seca.

L19: See response L18.

L20: As noted on page 2-6, Section 15 allotments that included isolated, small tracts of public lands were not inventoried. That is the reason for the "unknown" classification for ecological condition class for those allotments. Alternatives B, C, D propose management that should result in varying degrees of improvement in apparent trend.

L21 [COMMENT: How can so little acreage change to "good" condition in a long term no-grazing alternative?

Historically there haven't been large herds of wild grazing animals in the San Juan Resource Area. Yet, livestock grazing became a way of life for many people there. I believe it is wrong to assume that the limited botanical/water resources can support a successful livestock industry, and it should be discouraged by enacting much stricter laws allowing substantial forage/water resources to be available for wildlife/botanical resources, at the same time producing fewer but healthier, more valuable livestock.

COMMENT: I have a knowledgeable comment on few of the issues in this management plan. Yet it wasn't difficult to find out-dated information, inconsistencies, and conflicting statements.

I am pleasantly surprised that so many of the varied natural and manmade treasures of the Farmington Resource Area were identified and steps suggested for their preservation.

However, if this is the best chance there will be to "save" the resources of the area, I would urge selection of Plan B in combination with Plan D, as well as all other special management areas (Appendix B).

Any other plan would jeopardize the future of these resources, as has been the case at Simon and Rattlesnake Canyons, various ruins and other BLM properties.

L22 [Also, I am wondering how this will be financed? I recall a BLM recreation plan of several years ago filled with many worthwhile recommendations. I am not aware of any implementation of this plan.

L21: Much of the acreage used for grazing within the issue area is sagebrush-dominated grassland. Other acreage is in a category typed as "badlands" or "barren." In both cases, implementation of no grazing without accompanying vegetative treatments such as those described in Appendix M would have no appreciable effect on range condition. The improvements in condition shown in Table K-1 reflect anticipated changes in those range types that can reasonably be expected to improve if no grazing was the only action implemented.

L22: The plan referred to is assumed to be the Final Simon Canyon Recreation Area Management Plan (Sept. 1984) since it is the only such recreation plan. A Project Plan has been completed and implementation includes a gravelled parking facility, fencing, and signing of the area through a cooperative management agreement with the state of New Mexico. Financing of plan implementation is made possible through Congressional budget allocations.

Alan P. Nelson
710 W. 27th St.
Farmington, New Mexico 87401

APN:sn

April 13, 1987

LuAnn Wandanider
605 601d SE
Albuquerque, NM 87102

Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

Dear Mr. Fellows,

I am writing to express my concern over the contents and organization of various management objectives specified in the draft of your *Farmington Resource Management Plan and Environmental Impact Statement*. I have two areas of concern:

L23 I. Protection of Cultural Resources: You describe the effects of ORV's on the stability of the land surface as enhancing erosion. You further state that archaeological sites might, situationally, be impacted by ORVs. Yet, on page 1-18, you state that a Class III inventory, intensive inventory of 100% of affected lands, is "required prior to any surface-disturbing activity" (emphasis added). Through superimposition of your Maps B and C, it is possible to see that such resources have been found in virtually all places where they have been looked for. It appears to me that your Alternative D condones surface-disturbance to occur throughout the resource area (except for certain SMAs) before an adequate inventory of cultural resources is undertaken. Prehistoric archaeological sites are not trees that can be planted again nor are they a species that can be reared in captivity and then reintroduced into a suitable habitat. Once they are disturbed, they are gone forever. It seems to me that the BLM Alternative D is incredibly short-sighted. A policy that takes into consideration the non-renewable nature of archaeological resources might be one in which parcels of land are opened to ORV traffic after the archaeological remains that are invariably present in that parcel have been inventoried. With such a procedure, areas closest to Farmington and other population centers would be subject to a Class III inventory as soon as possible.

L24 II. Liability of the BLM for ORV Accidents on BLM property: Undoubtedly, the BLM claims no responsibility for ORV accidents that occur on BLM property. Nevertheless, certainly such accidents have occurred and certainly the BLM has been or will be

L23: To clarify BLM's responsibilities to comply with the NHPA, perhaps the statement on page 1-18 should read "required prior to any authorized surface disturbing activity." Casual ORV use by individuals is not an activity that requires a BLM permit or authorization, therefore this activity is not considered an undertaking and compliance with the NHPA is not required.

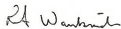
In addressing environmental consequences for the preferred alternative, Alternative D, the BLM recognizes that impacts may occur as a result of ORV use and has proposed mitigating measures to minimize or eliminate these impacts. These measures are identified on page 3-57. In addition, designation of the Dunes, Head Canyon, and Glade Run ORV SMAs should aid in directing ORV use to these areas and away from sensitive cultural areas.

L24: It is Bureau policy to implement a restrictive ORV designation where there are safety hazards and inform the public of such dangers. If you have knowledge of hazards or where accidents have occurred, please share this information. The Bureau is not aware of any litigation involving ORV activity in the Farmington Resource Area and has taken the appropriate measures to protect and inform the public of such dangers. The Bureau claims no responsibility for contributory negligence or actions of vehicle operators and can do little to prevent litigation where a person feels he/she has been wronged.

involved in litigation over its liability in condoning ORV use of its property. Please tell me why my tax dollars should be used to (a) compensate persons injured in ORV accidents on BLM property and/or (b) pay for the BLM to defend itself against charges of culpability in such a case.

Thank you for this opportunity to voice my concerns over your policies.

Sincerely,

A handwritten signature in dark ink, appearing to read "LuAnn Wandsnider". The signature is written in a cursive, flowing style.

LuAnn Wandsnider



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Navajo Area Office

P. O. Box 1060

Gallup, New Mexico 87301

8

IN REPLY REFER TO:
Branch of Contracts
& Property Management

APR 23 1987

Ron Fellows, Area Manager
Attention: RMP Team Leader
United States Department of the Interior
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:

The Navajo Area Office (NAO) has reviewed the draft Farmington Resource Management Plan (RMP) and Environmental Impact Statement (EIS) containing proposed management and resource alternatives of United States public lands (located in New Mexico) within your jurisdiction.

I want to take this opportunity to thank you for the RMP/EIS briefing on April 3, 1987 in Farmington. Please provide us a copy of the transcript of the taped briefing session at your convenience. Members of my staff informed me that the Bureau of Land Management (BLM) should be supported on the Preferred Alternative, provided that the Bureau of Indian Affairs' (BIA) comments and recommendations herein and in Exhibit A, are fully considered. The comments in Exhibit A are editorial in nature.

L25

L25: Comment noted.

Navajo Area Office Administration of Public Lands - Indian Use Areas

The NAO is in strong agreement that BLM will continue to retain the "Indian Lands Responsibility" and the "Navajo Occupancy Resolution Program" within the scope of, Continuing Management Guidance, as stated on pages 1-3 and 1-10 of the RMP/EIS. These sections within Chapter 1, Continuing Management Guidance, state that BLM will continue to work with the Navajo Area Office and the Navajo Tribe outside of the RMP/EIS, with regard to Indian lands and BIA administered lands (Indian use areas).

The NAO prefers to work with BLM and the Navajo Tribe through cooperative agreements, memoranda of understanding, and other interagency agreements regarding resource allocation emphasis in the Farmington resource area which includes Indian lands and Indian use areas.

L26

L26: The Bureau agrees and will continue to work closely with NAO on these matters.

The Indian use areas are authorized by Executive Orders, Secretarial Orders, and Departmental Orders, held today exclusively for the beneficial use of the Navajo Tribe. While the Indian use areas are

adjacent to consolidation areas, the lands are reserved from various forms of settlement, entry, and other disposal, and set aside for the Navajo Indians who have occupied the lands historically. The Navajo Indians have held the land by "character of title"; the right to possess and occupy the lands with use privileges; absent any clear and unquestionable trust title in the United States Government for the the Navajo Tribe of Indians.

Perpetual occupancy and use have included Indian programs, grazing, subsistence, housing, recreation, and small businesses. Several Presidents and Interior Secretaries have recognized that a part of Navajo Indian land needs could be satisfied from the public domain through issuance of various public land withdrawal orders since about 1907. Successional Congresses have affirmed this beginning with the passage of 228 U.S. 243 and more recently in legislation of 25 U.S.C., Section 2221, et. seq.

History indicates that any resource plan alternatives affecting Indian use withdrawn public land requires consideration of three elements:

- (1) Consultation with the tribe(s) affected; that 25 U.S.C., Section 2201, et seq. (The Indian Land Consolidation Act), together with Departmental policy 43 CFR 2091.5 are designed to assist the BIA (MWO) and BLM in administering resource planning on Indian use areas. Within this context,
- (2) Federal lands must be managed in accordance with the National Forest Management Act conservatively, and only as specifically cross-referenced by the Indian Land Consolidation Act. By the same token, Indian use lands
- (3) must be managed conservatively and only as specifically cross-referenced on their own merits, without being subject to rigorous exchange programs.

Furthermore, a land consolidation plan as embodied in Title Sixteen (Chapter 1) of the Navajo Tribal Code, adopted by the Navajo Tribal Council, allows the Tribe to "consolidate Indian holdings in 'checkerboard' areas whenever the best interests of the Navajos residing in the area and the welfare of the Tribe are served thereby...."

We request that this letter and all enclosures herein be entered into the official public hearing record on May 5, 1987, scheduled for 10:00 AM at the Navajo Skill Center in Crownpoint, New Mexico.

We appreciate the opportunity to comment and look forward to future collaboration on these matters.

Sincerely,

Area Director, Navajo

Enclosures

L27: Since 1907 there have been numerous withdrawals that set aside public lands for Navajo use. Some of these withdrawals placed the lands in trust status. However, PLO 2198 stated that the lands in the order were "temporarily withdrawn" for Indian use in aid of proposed legislation and of a land consolidation and exchange program to adjust Navajo Indian land matters in New Mexico, and to stabilize Navajo land use and non-Indian land use in areas outside of and in the vicinity of the Navajo Indian Reservation in New Mexico. Pending enactment of such legislation, the Commissioner of Indian Affairs shall administer the lands."

Administration of the surface on the lands placed in trust status or withdrawn for the Navajo people has been, and will continue to be, the responsibility of the BIA. Permission for use and occupancy of the public lands in the area must be obtained through the BLM.

Social impacts of land ownership adjustments are considered under each alternative of the draft RMP

L28: We are currently reviewing the E.O. 1483, E.O. 1359, E.O. 709 and E.O. 1000 lands to determine which tracts should be transferred to the Navajo Tribe by trust patent. In addition, we also intend to use trust patents to convey to the tribe some withdrawn lands that are substantially improved.

Some E.O.'s refer to withdrawn lands as being included in the Navajo Reservation and some reserve the land for Indian use. We intend to seek a legal opinion as to whether each category should be administered differently.

- L29: Consider it entered.

EXHIBIT A

Navajo Area Comments to the Farmington Resource Management Plan
Bureau of Land Management Report Number NM-PT-87-005-4410
March 1987

PART I Navajo Area Editorial Changes to the RMP/EIS
PART II Crownpoint Agency Comments to the RMP/EIS
PART III Navajo Area Additional Comments and Editorial Changes to the RMP/EIS

Property Management Section

PART I - Navajo Area Editorial Changes to the RMP

Page Comments to NAVAJO OCCUPANCY RESOLUTION PROGRAM

1-10 Change the entire second paragraph to read:

"Withdrawals to the BIA for the purpose of benefitting Indian groups will be used for administrative sites and for segregating the land from operations under the mining laws in support of land exchange, sale, purchase and assignment proposals."

1-10 Add the following sentence to the third paragraph:

"This coordination will be in the form of interagency agreement between the three groups as may be required."

L30: Public lands will continue to be withdrawn for the purpose of segregating the land from operations under the mining laws in support of land exchanges that benefit Indian groups and are in the public interest. However, administrative jurisdiction will not change as a result of the withdrawal and the lands will continue to be administered by BLM.

L31: Addition of this sentence is accepted.

UNITED STATES GOVERNMENT
memorandum

DATE: April 13, 1987
REPLY TO: Realty Specialist, Eastern Navajo Agency
ATTN OF: Comments Addressing the Draft RMP
TO: Assistant Area Director, Administration
Attention: Property Management

L32 Page 1-3 = "(On Indian lands all minerals are leasable)". This should include the wording "subject to Indian land owner's consent and B.I.A. approval".

L33 Page O-24, No. 16 = NATIVE AMERICAN AREAS OF CULTURAL SIGNIFICANCE - Why make exceptions of areas if the concerns are legitimate? Example - offering points are chosen and used for their location and terrain. Once used, it becomes a sacred place. Why then is Eagle hatching mesa addressed as a "maybe"? the concern is that if eagle mesa is considered as a "maybe", then what of other areas of sacred places. A more extensive study should be done to determine what are the actual concerns of the Indians instead of quoting past studies and non Indian materials.

L34 Page O-27, No. 17 =SINGLE GRAVE SITES there is a misunderstanding of the tribal practices and customs concerning gravesites. There is no practice or ceremony that deals with removal and reburial of human remains in the Navajo way. It is simply NOT DONE. This custom should be observed more closely and considered by the RMP.

GENERAL COMMENTS:

L35 The Farmington Resource Area Map in the package should be revised to reflect the true status of the lands within the area. In a cross check with the B.I.A. plat book, it was discovered that all of the submarginal lands transferred to the Navajo Tribe by P.L. 94-114, dated October 17, 1945, is shown by the map as public domain lands. These lands are Indian lands and should be colored in their true status. Other lands not shown in their true status color are lands bought by the Navajo Tribe. The concern is that a member of the public, not familiar with the land status of the area, can easily be misled to believe that there is a lot of public lands available in the area of the miscolored locations. By recoloring the map to reflect the true land status, the map would serve as a more efficient tool in review of the RMP and will not mislead the public. It could also serve as a reason to redetermine the boundary of the resource area.

L36 The RMP should state that the RMP is only for the public lands and does not affect Indian lands, just to keep the record straight.

L32: Comment accepted.

L33: Paragraph 4 page O-26 of the draft states that the area identified as Eagle Hatching Mesa is located on state surface with state minerals. The site will not be impacted as a result of federal leasing. However, if the state of New Mexico issues a lease for the state minerals, it is the state's responsibility to take this into consideration.

The Bureau of Land Management contracted with Fred York through the Office of Contract Archeology at the University of New Mexico to conduct a study of the proposed coal tracts. The specific goals of the study were 1) Identify those parcels which should clearly not be leased because of overriding NHPA or AIRFA concerns, 2) Identify other areas which contain serious conflicts between Native American cultural values and mining development, but which may be mitigated, and 3) develop information which will guide later, more intensive studies and mitigating measures. Mr. York interviewed chapter managers, chapter officials, and tribal councilmen as well as traditional ceremonial practitioners or medicine men familiar with the areas in and around the proposed coal tracts. An extensive literature review was also conducted. Fieldwork was completed in June through September of 1986. We believe this to be the most recent and expansive study for the area to date. The draft report is referenced in paragraph one page O-28 of the draft.

L34: It is recognized that there are no ceremonies associated with the reburial of human remains. As stated on p. O-27 of the DRMP family consent would be required for moving a grave site.

L35: The statewide land status map series (scale 1:100,000) will be revised to reflect an accurate account of land ownership. A schedule for revision has not been established.

L36: Statements that the RMP applies only to public land appear on pages S-1, I-1, and 3-1 of the draft.

L37 The competitive coal tracts and the PRLAs both contain Indian allotments with the coal reserved to the United States. These lands should be excluded from further leasing or mining activities until the "Eticity case" has been resolved. This would prevent the accounting and reimbursement of royalties that would be needed if the courts rule in favor of the Indian surface owners.

L38 GRAZING: No mention is made of the cooperative agreement between the BLM, BIA, and the Navajo Tribe, concerning grazing within the resource area. The proposed adjustments of grazing allotments, improvements and animal units should require consultation with the other parties of the agreement.

L39 The problem with BLM regulations for public lands is that they are written with the assumption that the public lands are vacant, and no Indian Tribe or Individuals occupy any portions of it. The Farmington Resource Area is one exemption to this rule since their boundary includes lands and use areas of the Navajo, Zuni, Utes and the Jicarilla tribes. All the screening and criterias used to evaluate the public lands address wildlife, vegetation, scenery and even minerals. Yet, no where is there a criterion for addressing human rights as to occupancy, use or religious concerns. There should be separate regulations developed for areas such as the Farmington Resource Area to address these issues.



L37: The "Eticity case" is still in federal court. Pending resolution of the case, BLM must identify lands to be considered for leasing in a comprehensive land management plan in order for them to be available for future leasing or forego their leasing until the next planning cycle. The RMP does not propose to lease individual tracts. It only places the tracts in the pool for lease consideration.

L38: The cooperative agreement is referred to in the draft RMP as a Memorandum of Understanding (MOU). Reference to the MOU is made on pages 1-11, 1-25, 1-26, 2-32, 1-36, 1-40, and 3-6. On page 1-26 we state that the MOU is being implemented. Any proposed adjustments will be implemented using the established consultation, coordination, and cooperation procedures with affected individuals and groups, to include the BIA and the Navajo Tribe.

L39: Regulations are normally written to cover administration of all public land. The approval process for new regulations is extensive. We also recognize that 25 CFR does not adequately cover the administration of lands withdrawn for Indian use.

Perhaps some of the problems that you describe should be topics for discussion in the work groups identified in a proposed Tri-Party Cooperative Agreement.

We do hope to provide you with a letter in the near future that will essentially say that 43 CFR does not apply to FLO 2198 lands. This should be of some help in trying to administer homestead and business leases and permits on FLO 2198 lands.

UNITED STATES GOVERNMENT

memorandum

DATE: April 17, 1987

REPLY TO: Surface Protection Specialist and Area Range Conservationist
ATTN OF:

SUBJECT: Comments on Farmington Resource Management Plan

TO: Ms. Rosemary Knoki

- L40 1. Off road vehicle (ORV) impacts on soils, rangeland, and wildlife habitat are seriously understated in this document. There is an abundance of scientific literature which regards the deleterious effects of ORV use on arid, fragile lands. These lands are not dissimilar from public lands covered by the Rio Puerco RMP, yet less than 10% are recommended for "limited" or "closed" status. The implicit conclusions that such uses will have only "slight" impacts are unrealistic, shortsighted and unfounded.
- L41 2. Alternatives "B" (Conservation) and "D" (Preferred) propose reducing available AUM's by almost 26,000, or more than 43%. These actions would have profound economic impacts on hundreds of Navajo stockgrowers who already survive at subsistence levels. Such actions would place these families at submarginal income levels. No proposals for mitigating these impacts are discussed in the document nor does the RMP address the effects of coal development on existing grazing allotments—their improvements, fences, waters, etc. The Bureau of Land Management (BLM) is talking about almost cutting the local livestock industry in half and disrupting it in numerous other ways but persists in referring to impacts as "slight". This is clearly not an adequate evaluation.
- L42 3. Stating that habitat management plans need to be written does not address wildlife concerns. These are not even identified in some cases, much less evaluated.
- L43 4. Long-term forage projections consistently suggest AUM's available from reclaimed land. It is critical to point out that no company has successfully demonstrated good reclamation in this region to date; therefore, BLM should add a criteria for reclaimability in accordance with the Surface Mining Control and Reclamation Act, Section 522 (a)(2). SMCA provides that lands shall be designated as unsuitable for mining if "reclamation pursuant to the requirements of this Act is not technologically and economically feasible." This should take into account the present and future use of the area. This criteria should be addressed since BLM persists in using reclamation after mining as mitigation.
- L44 5. BLM must assume its obligations to protect sensitive areas by applying unsuitability criteria to those lands that must be set aside from coal leasing to preserve the resource.

RECEIVED

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DISTRIBUTION TO OFFICES
NAGP & AREAOPTIONAL FORM NO. 10
(REV. 5-80)
GSA FPMR (41 CFR) 101-11.6
5010-104

U.S. Government Printing Office: 1980-345-328/4215

L40: Indeed, the literature is very impressive. From an administrative perspective, the scientific evidence and functional priorities are considered relative to present use, demand and ability to enforce designations within the geographic planning area of the Farmington Resource Area.

L41: Alternative B proposes a reduction of 25,622 AUMs and Alternative D proposes a reduction of 15,174 AUMs. These reductions represent a 34.1 percent and a 20.0 percent decrease, respectively, from the total current use level of 75,737 AUMs within the issue area. The table on page 1-29 of the draft that you apparently used to derive the 43 percent figure shows AUMs from allotments that were actually inventoried (see Table 1-3) and does not reflect the AUMs authorized to non-inventoried allotments. Information that will allow the reader to more easily arrive at the correct figures has been added to Table 1-4.

Proposals for the mitigation of impacts caused by grazing reductions or a discussion of the effects due to coal development are beyond the scope of this RMP. Section 8 consultation procedures outlined in the Public Rangelands Improvement Act provide for mitigative remedies to be developed before or after final grazing decisions are issued. The effects of coal development were discussed in a previous document, the San Juan River Regional Coal EIS. For this reason, no attempt was made to repeat the analysis in the RMP. See page 3-3 of the draft RMP for additional discussion. See also the general response to the vegetative uses issue at the beginning of this section.

L42: Habitat management plans have already been prepared and are being implemented for the majority of the blocked public lands in the FRA (see list on p. 1-16). Wildlife concerns in the resource area are addressed in these habitat management plans and other continuing management guidance as described on pages 1-15 to 1-18. As stated twice on page 1-18 the only HMP which is presently needed is one addressing sensitive plants.

L43: It is incorrect to state that "no company has successfully demonstrated good reclamation in this region". Excellent reclamation is occurring at the San Juan Mine with some initial irrigation and at the De-na-zin Mine without any irrigation. Successful revegetation is also occurring at the McKinley Mine. Conditions on these active mines appear to be equivalent to those on the tracts brought forward for further consideration.

L44: The coal unsuitability criteria have been applied. This is discussed in detail in Appendix O (pages 0-5 to 0-20) of the draft.



DISTRICT 20
LITTLEWATER CHAPTER

CROWNPOINT, NEW MEXICO 87313

PHONE (505) 786-5488

Chairman PETER McDONALD

Vice Chairman JOHNNY R. THOMPSON

Tribal Delegate
 THOMAS BARBONE

Chapter President
 HENRY LARGO

Vice President
 BENNE ENRICO

Secretary
 WILLIAM RAYMOND

Chapter Manager
 PAUL B. JONES

Resolution

Recommendation and Request to Bureau of Land
 Management on Proposed Resource Management Plan
 of withdrawing on PD land #31, 1/4 Section
 (southwest)

WHEREAS:

1. Littlewater Chapter is a local governing body recognized under the Navajo Tribal Council; and
2. Littlewater Chapter land withdrawn is to convert Navajo Tribal land; and
3. Public Domain #31 is presently adjacent to Littlewater Chapter premises.
4. Public Domain #31 is isolated area which is presently hard for the BLM to maintain.

L45 NOW THEREFORE BE IT RESOLVED:

1. The Littlewater Chapter is recommending the Bureau of Land Management on land withdrawn of PD Land #31, 1/4 Section (southwest)
2. This withdrawn land will be improve, developed by the chapter.

C E R T I F I C A T I O N

WE HEREBY CERTIFY THAT THE FOREGOING RESOLUTION was duly considered by the Littlewater Chapter at duly called meeting at Littlewater Navajo Nation New Mexico, at which a quorum was present, and that same was passed by a vote of 25 in favor and 0 opposed this 01 th day of May, 1987.

Henry Largo
 Henry Largo, President

L45. Ordinarily public lands cannot be withdrawn for general purpose (grazing, development, resource management, etc.) to a Navajo Chapter [FLPMA Section 204(c)(2)]. If you have a real need for additional land, we suggest that you work through your BIA office which will contact the BLM if necessary.

Goodloe Ranch

18 Miles Northwest
Box 598
Capitan, NM 88316
505-354-2379

May 4, 1987

Mr. Ron Fellows
Area Manager
BLM - Farmington Resource Area
900 La Plata Highway
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:

I understand that planning is underway for the Farmington Resource Area. I would like for you to consider my concerns prior to the release of your Draft Resource Management Plan in March, and would like to be placed on your mailing list.

Indications are that you plan to "designate all BLM lands open to ORV use where compatible with existing resources". This allows a very broad interpretation of what is or is not, compatible to ORV's, and can negate most efforts to control significant resource damage. I suggest that the Farmington Resource Area be closed to ORV's unless designated open for the following reasons:

1. A Federal Court in Washington, D. C. ruled ten years ago that the EIS prepared by the Department of Interior enunciating a policy of "open unless designated closed" which was to implement E.O. 11644 did not satisfy the intent of The Executive Order.

2. An explosion in the numbers of ORV's has occurred in the last five years. As an example, ATV deaths have increased from 26 in 1982 to 238 in 1985--900%. ATV's shipped from the four major manufacturers increased from about 300,000 in 1982 to about 600,000 in 1985--100%. There is no reason to expect this trend to change.

3. Public comment on the Lincoln Forest Plan favored a restrictive policy toward ORV's 10 to 1. Consequently, the resulting ORV policy states that the Lincoln Forest is "closed unless designated open". Although the use pattern in the Farmington Resource Area may not reflect such massive numbers of ORV's, it most definitely will. Control will become increasingly difficult.

4. Law suits have sought to assign responsibility for ORV-ATV injuries to government agencies on the theory that they have opened their lands to such use without adequate supervision, control or warnings of danger.

L46: The listed figures and opinions are noted and were very helpful in defining ORV designations as a planning issue; however, they do little to resolve the issue. Blanket restrictions as suggested are counter to Bureau policy. Refer to response L40.

Mr. Ron Fellows
May 4, 1987
Page 2

5. Uncontrolled use of public lands by ORV's is the single most dangerous and damaging use of those lands today. This damage is completely out of proportion to the benefits received by those who use our public lands.

6. The erosion caused by unregulated ORV's will be with us for generations. Watershed damage of that magnitude is unacceptable.

7. The most immediate and severe effect upon wildlife habitat in the eleven western states is uncontrolled ORV traffic.

8. The aesthetic value of our public lands will be altered drastically unless we address the ORV problem immediately.

9. Almost all other recreational uses of the Farmington Resource Area; hiking, bicycling, equestrian trails, hunting etc. are adversely affected by uncontrolled ORV use.

10. Riparian areas that have been considered inaccessible are no longer in that category. They should be of primary concern and protected from ORV use.

11. Enforcement of ORV regulations will be much easier and less expensive if all of the Farmington Resource Area not officially designated as "open" are regarded as closed to ORV use.

Sincerely yours,


Sid Goodloe

SG/ppp



United States Department of the Interior

BUREAU OF RECLAMATION
SOUTHWEST REGION
COMMERCE BUILDING, 7th S. TYLER, SUITE 201
AMARILLO, TEXAS 79101-2386

11

IN REPLY
REFER TO: 150

MAY 07 1987

Memorandum

To: Area Manager, Farmington Resource Area, Bureau of Land Management,
Farmington, New Mexico

From: Regional Director

Subject: Draft Farmington Resource Management Plan and Environmental Statement
(ES), Farmington Resource Area, Farmington, New Mexico

L47

As requested by your letter of instructions included in the subject draft ES, the Southwest regional office of the Bureau of Reclamation (Reclamation) has reviewed the subject document. Implementation of Alternative D appears to generally benefit water resources by acquisition of riparian tracts and improvement of range condition on grazing lands. In connection with Reclamation's Gallup-Navajo water supply study, our preliminary water supply pipeline follows State Highway 371. As this study progresses, we will coordinate with your office as to the pipeline location and the implication of your "right-of-way window" concept. For information concerning this study, please contact Mr. Nick Palacios, Study Coordinator, at 806-378-5474 or FTS 735-5474.

L47: Comment noted.

We appreciate the opportunity to review and comment on your draft environmental statement and resource management plan.

cc: Commissioner, Attention: 150

Regional Environmental Officer
Office of Environmental Project Review
Post Office Box 2088
Albuquerque, New Mexico 87103



9220 Arvada, N.E.
Albuquerque, NM 87112

May 11, 1987

Bureau of Land Management
Farmington Resource Area
Canner Service 4104
Farmington, New Mexico 87499-4104

Gentlemen:

This letter contains the comments of the New Mexico Archeological Council (NMAC) on the Resource Management Plan for the Farmington Resource Area of the Bureau of Land Management. NMAC is an organization of professional archeologists representing many of the archeologists in this state who are employed in public archeology. Our concerns cover both the protection of archeological resources and the development of the state's natural resources. Many of our members perform contract services for the firms engaged in the development effort.

L48 We wish to compliment the BLM for careful attention to archeological resource values in developing its preferred alternative (Alternative D) in the plan. We are particularly pleased to see the full commitment to completing all required consultation under Section 106 of the National Historic Preservation Act. We also appreciate the agency's recognition of its responsibilities under Section 110 of the act, embodied in the proposal to complete a 10%, non-project driven inventory of the resource area during the 20-year life of the plan, although we are concerned about the use of data from this inventory for predictive modeling, a practice which could be disastrous for the very important cultural resources of the San Juan Basin (page 1-20).

There are three areas of the plan which we strongly feel require improvement. These deal with the retention of two SMA's, the treatment of off-road vehicle closures, and the nomination of sites to the National Register of Historic Places.

L50 With regard to the La Plata Valley and Canada Larga SMA's, we urge caution in the BLM's intentions in Alternative D to remove the former's SMA status, keeping only the East Side Rincon Site, and to dispose of the latter SMA. Specifically, we recommend that the BLM include in its preferred management alternative the entire La Plata Valley SMA rather than just the East Side Rincon Site, since, in the BLM's own evaluation, the La Plata Valley contains "the full spectrum of Anasazi development in the northern San Juan Basin," including Chacoan outliers (page B-40). This characteristic would seem to make the area significant in terms of the BLM's policy (8100.02A) of preserving a sample of the "full array of cultural resources."

L48: Comment noted.

L49: Paragraph 2 page 1-20 states only that a model will be built. It does not refer to use of predictive modeling in eliminating the need for inventory, which we assume is what you are referring to. By building a model of site density and distribution, we can make better informed decisions regarding law enforcement needs, monitoring for site condition, recommendations for future leasing and development, acquisition of non-federal tracts with potentially high cultural resource values, etc.

The high site density, as well as the presence of unique site types in the FRA, precludes the application of predictive modeling to eliminate intensive Class III inventory. We share your concerns about predictive modeling and recognize the limitations and dangers of its use.

L50: These two units are unmanageable as cultural SMA units due to land ownership patterns and size. The Bureau will continue protection of cultural resources in these areas under continuing management guidance.

May 11, 1987

L51 Concerning the disposal of the land included in the Canada Larga SMA, we feel strongly that, in the case of an exchange, the U.S. Forest Service and specifically the Santa Fe National Forest is the only appropriate recipient of that land. This region, which contains a high density of Gallina sites, should not by any means leave federal jurisdiction, and if it must leave the BLM's hands, we urge the BLM to pursue a transfer of the land to the Santa Fe National Forest. If such a transfer is not possible, the land should remain in BLM administration.

Concerning the issue of off-road vehicles, we note that the BLM's program to restrict or prohibit the use of ORVs varies markedly from one resource area to another. In the RMPs for the Rio Puerco and Taos Resource Areas, much more extensive closures are anticipated. Archeological sites are among the critical environmental resources which can be badly damaged, even destroyed, by ORVs. While the primary criteria for closure in other resource areas may have been soil or vegetative concerns, the archeological sites in those resource areas will also greatly benefit from the decision to restrict or prohibit ORV use. While soil and vegetative concerns are less prominent in the Farmington Resource Area, the richness of the archeological resources there requires special attention.

We recognize that the wholesale prohibition of ORV use is not feasible in the Farmington Resource Area, particularly outside the recreation zone. We do, however, strongly feel that more protection should be afforded than the minimal level contemplated in Alternative D of the plan, in which only one of the Cultural Resources SMAs is recommended for "closed" designation (page 1-39). We recommend a two-pronged approach to remedy this deficiency:

- L52
1. The BLM should more closely examine the currently available data and identify areas to be closed to ORV use in order to protect known concentrations of archeological sites and/or especially significant sites. Closing all SMAs identified with cultural resources would be one step in this direction, but attention should also be given to known concentrations of lithic scatter sites and other surface sites which are particularly susceptible to damage from ORV use (see page 3-15).
 2. The BLM should commit to a program to identify additional areas which require such protection and to close them from ORV use when the information on their resource values becomes available. This program could integrate the BLM's commitment to achieve a 10% inventory of the resource area over the 20-year life of the plan with development clearance projects to better secure the protection of especially significant sites or concentrations of sites.
- L53

L54 The BLM currently contemplates nomination of one property per year to the National Register of Historic Places. We strongly feel that this target is too low. Nomination to the register is one of the best available tools to enhance the protection of exceptionally important properties. We strongly urge the BLM to commit to the nomination of at least one property per year for each full-time Cultural Resources Specialist employed by the resource area. This standard was recently adopted by the U.S. Forest Service when it settled its lawsuit with NMAC and other groups. We also strongly urge that the plan identify the generation of district or group nominations as the preferred method.

L51: In all likelihood the nature, density, and mitigation requirements of sites in the Canada Larga area will prevent transfer of the land to any but another federal agency. The cost of inventory, recordation, and mitigation of impacts for these sites will likely prohibit transfer to individuals or agencies not required to adhere to all federal laws and regulations protecting cultural resources. Your preference for transfer to the Santa Fe National Forest has been noted.

L52: The identified SMAs prescribed for a "limited" ORV designation are assessed as more than adequate to protect cultural resources and is compatible with stated goals. A "closed" designation would unnecessarily hinder access to public lands and could restrict interpretation of sites.

L53: Paragraph 1 page 3-44 states that the 10% inventory should help to identify additional areas and measures will then be taken to protect them including, if necessary, additional ORV closures.

L54: National Register nominations are among the actions pursued under continuing management guidance. We will continue to nominate important cultural properties to the National Register. However, nomination is only one of a range of protective measures which may be considered. Rather than committing to a set quota of nominations per year, we intend to include this option in cultural resources management plans, where it will be ranked in order of priority with other protective actions.

Bureau of Land Management

-3-

May 11, 1987

NMAC thanks the BLM, Farmington Resource Area for the opportunity to comment on this important planning document. Should there be a need for clarification of our positions, please do not hesitate to contact us.

Sincerely,

A handwritten signature in cursive script, appearing to read "Landon D. Smith".

Landon D. Smith, President
New Mexico Archeological Council

Cerrillos Land Company

6000 Uptown Blvd. N.E., Suite 400
Box 27019
Albuquerque, New Mexico 87125
505/881-3250

April 22, 1987

13

Mr. Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:


Cerrillos Land Company has reviewed the BLM "Draft Farmington Resource Management Plan" dated March, 1987. From review of this document it appears that mineral estates owned by Cerrillos Land Company and its affiliate, Santa Fe Pacific Railroad Company, are involved in one SMA and may be involved in three others.

Cerrillos/Santa Fe Pacific has mineral ownership within SMA #37, Upper Puerco Watershed. These companies may have mineral ownership in SMA #14 (Navajo Refugee Sites), SMA #18 (Chaco Outliers Group), and SMA #19 (Chacra Mesa Complex). The maps contained in BLM's Draft RMP are not detailed and we have been unable to determine from them whether or not our ownership will be affected. In order to make this determination, we request that you provide us as soon as possible with detailed maps for SMA's #14, 18, and 19.

As noted above, Cerrillos/Santa Fe Pacific mineral ownership will be affected within SMA #37. Management prescriptions to be employed by BLM must not adversely affect our rights of access, exploration, and development of these mineral resources. If it is determined that our rights will in any way be diminished by such management prescriptions, then Santa Fe Pacific must have adequate compensation for the loss of these rights. Such compensation could come in the form of a mineral estate exchange. No mineral estate exchange has been recommended for SMA's #14, 18, 19 or 37. Cerrillos/Santa Fe Pacific believes that mineral estate exchanges must be considered in the event that our vested rights in our mineral estates will be diminished in these WSAs by any BLM management activities. Thank you for this opportunity to comment.

L55: Note that SMA #37 was not brought forward to Alternative D. Therefore there should be no effect on the mineral rights noted. SMAs should not be confused with WSAs and will be managed with full consideration of prior existing rights and claims.

Very truly yours,


George G. Myers
Director-Public Affairs

GGB:gem

CC: G. R. Wagner
D. B. Trubey
R. N. Gray
M. Jarka
J. T. Williams



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Navajo Area Office
P. O. Box M
Window Rock, Arizona 86515-0714

14

IN REPLY REFER TO:
ARPM/332

MAY 15 1987

Mr. Ron Fellows, Area Manager
Attention: RMP Team Leader
United States Department of the Interior
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:

The enclosed May 7, 1987, comments on the RMP should be included with previously submitted BIA material on the plan. Thank you.

Sincerely,


Lloyd L. Espinoza
Area Director

Enclosure

UNITED STATES GOVERNMENT

memorandum

DATE: MAY 7 1987

REPLY TO: Acting Area Archeologist

SUBJECT: Technical Review of the Draft "Farmington Resource Management Plan"

TO: Area Director

Through: Assistant Area Director, Indian Programs

The Archeological Clearance Project has reviewed the draft management plan for the Bureau of Land Management Farmington Resource Area and offers the following comments.

L56 Chapter 1- The vast majority of the lands "administered" by the Farmington Resource Area are Indian Lands. Portions of four reservations (Navajo, Jicarilla Apache, Ute Mountain and Zuni) comprise the bulk of the land which is discussed in this plan. It is noteworthy that the most of the Eastern Navajo Agency is included within the "exchange zone" and numerous Indian Lands near Chaco Canyon are included in the "acquisition zone". In short, the BLM appears to be attempting to consolidate holdings in areas where it already has major holdings (Governador and Kibeto areas) while dumping its holdings in those areas where Indian groups have major holdings (Pinedale, Hosta Butte, Vandervagen, Star Lake, etc.).

L57 The impacts of inserting private landowners into areas in Indian Country which have formerly been under Federal control deserves examination prior to the implementation of any of the alternatives which require land exchanges. It is suspected that this attempt to pull back from dealing with Indian Lands in terms of surface management issues will have impacts to those Indian Lands in exchange areas. In fact we may be subjecting those individuals with whom we retain a trust relationship to less protection under private laws such as the Archeological Resources Protection Act (should private land owners encourage pot hunters to use lands in exchange areas) or the Surface Mining Coal Reclamation Act (should coal mining be performed within exchange areas).

The overall management framework presented by BLM is overly simplistic. There are four choices:

- 1) do things like they presently are done
- 2) conserve resources
- 3) use resources
- L58 4) compromise between use and conservation.

The draft report takes the tack that the first three are bad but the last is acceptable. Since the BLM brought the subject up, it seems that there are questions as to whether the BLM presently

L56: Except for mineral inspection and enforcement responsibilities, the BLM has no other authority on Indian reservations (see page 2-2). Administration of Indian reservation lands is the responsibility of the Bureau of Indian Affairs. As stated in the Summary (page S-1), Introduction (page i-1), and Environmental Consequences (page 3-1) sections, this RMP applies only to the public lands in the Resource Area. The definition of "public lands" specifically excludes "lands held for the benefit of Indians, Aleuts, or Eskimos" (see Glossary).

Our purpose is to consolidate our landholdings in areas with large blocks of public lands in order to make our management of the area more efficient. We propose to dispose of scattered public lands because they are difficult and uneconomical to manage.

Indian lands near Chaco Canyon were identified for acquisition in Alternative B because of the significant public values of the land as identified in legislation that has already been passed by Congress. The acquisition zone of the preferred alternative contains no lands near Chaco Canyon.

L57: Any exchange proposals will be analyzed on a case-by-case basis and be subject to all applicable federal laws. Potential coal lease areas have been excluded from exchange by creation of the Coal Belt SMA. SMCHA applies to all federal coal regardless of surface ownership. Nothing in any of the alternatives should reduce protection of resources under either AHPA or SMCHA.

L58: The Bureau is mandated by law to administer public lands under a multiple-use mission regardless of RMP alternatives. The issue-driven RMP resolves conflicts through formulation of reasonable scenarios or alternatives. Each of the four alternatives identified contains different strategies for public land management which would result in different impacts if implemented. Refer to the Introduction in the draft: The Planning Process, Step 5. As stated on page 1-23 all of the alternatives are reasonable and implementable under existing laws and regulations.

The allegation of improper protection of resources cannot be addressed without specific details. If such evidence exists please make it available to the area office for resolution.

OPTIONAL FORM NO. 10
(MAY 1962 EDITION)
GSA FPMR (41 CFR) 101-11.6
5010-106

U.S. Government Printing Office: 1982-301-825/825

is doing an adequate job to protect resources. It is not clear how the new system (which is in fact a restatement of the current "multiple-use" mission of the BLM) will alter the current deficient situation.

L59 Under the "preferred alternative" the BLM will consolidate holdings in the Gobernador Area. At present there are no Indian holdings in that area. However, it is clear that the Gobernador Area contains numerous early Navajo sites and locations of a sacred/respected nature to many Navajos. It is recommended that as part of its land exchanges that the BLM consider making exchanges with the Navajo people in order to return their ancestral sites to Navajo control. The Navajo Tribe has yet to express a formal opinion concerning the land status of these ancestral remains. However, under current BLM and private management these sites are being subject to numerous impacts from oil and gas development as well as general deterioration.

Chapter 2

L60 The unlabeled table on page 2-26 should indicate that there are 1,728 Navajo sites under non-BLM jurisdiction not "1,728". On that same page there is no graphic description of the 0.16 percent of Paleo-Indian sites in Figure 2-2.

L61 The proposed recreational plans tend to occur away from population centers which are within Indian lands.

Chapter 3

L62 It is not clear whether the indirect effects of the proposed land exchanges have been considered as to their impacts to Indian lands. While the impacts related to off-road-vehicular traffic in the Laplata and Farmington Glade areas are mentioned, the BLM does not indicate that Indian lands adjacent to designated ORV areas will likely be subject to similar impacts.

L64 Given that there will be a mitigation program for archeological sites in land exchange areas (presumably based upon a sample), there will still be a loss of archeological values. Mitigation programs are at best a poor substitute for other protective measures. The argument that allowing a percentage of a group of sites to be impacted because a sample of these sites will be preserved elsewhere is not in keeping with the preservation ethic espoused earlier within the report. This preservation by attrition could be carried to a point where there is only one representative of a site type left even though the government never allowed more than 50 percent of the known sites to be destroyed at a time. Thousands of sites have already been destroyed through neglect and for other reasons.

L50: Your comment is noted regarding exchanges. The RMP designates a total of 26 areas containing 38 Refugee period sites. All have recently been listed on the National and State Registers and will receive special management attention by implementing the management prescriptions shown on page A1-30 of this document. Implementation should eliminate the impacts resulting from new oil and gas development and lessen the natural and visitor induced impacts. Our 10% inventory and development of a data base identifying areas of concern to Native Americans (page A1-33) may result in designation of additional areas protected by management prescriptions similar to those for the Refugee sites.

L60: These changes have been made.

L61: There are absolutely no proposed recreational plans within Indian lands. The Bureau plans and manages recreational areas on public lands only.

L62: The direct effects of proposed land exchanges could potentially be very beneficial to adjacent Indian lands through consolidation of holdings. A statement to this effect has been added to the Environmental Consequences section for Alternative D.

L63: Similar impacts are not expected. Noise may be an indirect impact; however, vehicles have been using these areas for almost 30 years with no reported adverse impacts.

L64: If lands in the exchange zones are to be turned over to private ownership an appropriate mitigation program will be designed in consultation with the SHPO. Your comment will be taken into consideration during evaluation of cultural properties and the proposed treatment of these properties. In many cases, lands in the exchange area will be turned over to the Bureau of Indian Affairs. Enforcement of the NHPA and other relevant federal laws and regulations would be expected to continue. Any lands turned over to the state of New Mexico will be evaluated as outlined in our MOU with the state as discussed in paragraph 2 on page 3-57.

L65: Even though the BLM plans to include binding protective clauses in the land exchange agreements, there is no mechanism discussed by which the BLM will assure compliance with these clauses. Will the BLM still patrol such sites? Will the exchanges be nullified by non-compliance? Those sites within areas exchanged to private lands will not be protected by the Archeological Resources Protection Act. This results in a net decrease in protection despite the exchange agreements.

Chapter 4

No comment.

Appendices

L66: Navajo Refugee Sites- It is recommended that rather than create a special management area for the 25 Navajo Refugee sites listed that land exchanges be arranged which would revert these ancestral sites to the Navajo Tribe. ORV traffic should be prohibited in this area.

L67: Native American Traditional Use & Sacred Areas- The list presented of sacred areas is extremely abbreviated. Some sacred areas, such as Huerfano Mountain, already have existing Ru-O-W within them. It is not clear if these existing Ru-O-W will be removed. Additionally there is no commitment to protect the numerous other sacred areas which will be "discovered" in the coming years.

L68: Canada Larga- It is well known that such of the extensive vandalism to archeological resources within the Canada Larga relate to oil field development. Accordingly the proposed management plan will continue this situation with no additional protection for sites.

L69: Chaco Outliers Group- This section contains some points of inaccuracy. The BLM recently requested that Site Morris 41 be dropped from the Chaco Sites Protection System because of their inability to acquire the property from the owner. Accordingly this site should not be included within the management plan.

L70: Chacra Mesa Complex- The "limited" ORV designation does not appear to provide protection to archeological resources.

L71: Coal Belt- It is clear that the coal belt area is almost wholly within an area which the BLM will attempt to consolidate. The use of this area for coal mining does not match the multiple use approach which the BLM is expounding elsewhere in this plan. Clearly this is the real intended use which the BLM intends to make of this land. It is notable that the BLM appears to be attempting to remove these lands from Indian jurisdiction in

L65: No exchanges will be consummated without completing all inventory and mitigation programs as required by the NHPA.

L66: Your comment is noted; however, the BLM will continue to manage these sites. Possibilities exist for a cooperative management agreement. Vehicular traffic will be limited to existing roads designated for use in the area and off-road travel will not be allowed. This requirement is stipulated in the management prescription on page A1-30.

L67: Existing roads, rights-of-way, and wells will be allowed to remain. However, if the BIA and Navajo Tribe decide to ask for removal of these facilities on lands under their jurisdiction, the BLM will reconsider this policy.

Management prescription 6 on page B-38 of the draft RMP states that ethnographic and literature searches will be conducted to identify areas of concern for designation and management as SMAs. The final note on this same page states that "It is expected that additional areas of importance to Native Americans will be identified...as a result of objectives 5 and 6 above."

L68: See response L50.

L69: The recommendation to drop Morris 41 from protection under PL 96-550 was made after the draft RMP was printed. Morris 41 has been eliminated from further consideration in the RMP.

L70: In this case, a "limited" ORV designation requires all vehicular traffic to stay on existing roads and trails. "Closure" would prevent access by local Navajo occupants for woodcutting and pine nut gathering. We feel the limited designation provides adequate protection given the number of roads and trails in existence within the SMA.

L71: The coal belt SMA was created to preserve as nearly intact as possible the San Juan Basin's federal surface-minable coal. In the event of future coal leasing and surface mining, both federal and state royalty interests will have been protected by special management prescriptions applied now. Meanwhile, grazing, T&E species monitoring, cultural resource surveys and monitoring, paleontological research, oil and gas exploration and other "multiple" uses are ongoing and will continue when mining, if it occurs, is finished. Moreover, coal leasing does not necessarily constitute either "single-use" management or irreversible damage to the land. Livestock grazes on part of both the San Juan and La Plata leases. Fuelwood is harvested and piled for public use at La Plata Mine. McKinley Mine sponsors an active program of deer trapping and transplanting, and boasts one of the most successful revegetation programs to be found anywhere. SHCRA, NEPA, ARPA and other federal environmental laws apply and will continue to apply to federal coal leases. The lands in the SMA are presently under BLM, not Indian jurisdiction.

order to implement a multiple use plan and once this has been accomplished will implement a single use (mining). Additionally the removal of Indian lands from the mine area will mean that SMCRA and tribal environmental regulations may not be applicable to the mines.

- L72 [Right-of-Way Windows- Since these areas have not been inventoried it is not clear what the effects to cultural resources will be.

- L73 [Federal Coal Lands Review Process- It seems that BLM is carrying forward plans for coal leasing despite a recognition that many of the Indian lands involved may be unsuitable under criteria 2 and 3. Additionally in many of the tracts which are being considered for leasing the landowners have not expressed their wishes as to whether coal leasing can be permitted. This does not seem to indicate that a good faith effort on the part of BLM FRA.

- L74 [Unsuitability Criterion 2- Lands used for agricultural purposes are unsuitable to mine. Indian owned agricultural lands are still being considered for coal leasing.

- L75 [Unsuitability Criterion 3- Lands contains cemeteries are unsuitable for mining. It is suspected that there are dozens of "traditional" burial grounds within areas where the BLM intends to lease coal. These traditional burials are recognized under SMCRA as bona fide cemeteries.

- L76 [Unsuitability Criterion 5- No evidence has been presented that the scenic qualities of Indian lands have been considered.

- L77 [Unsuitability Criteria 11 and 12- There is abundant evidence that eagles use and live within Indian lands being considered for coal mining.

Summary

- L78 [The Farmington Resource Management Plan and Environmental Impact Statement champions a program which would result in a decrease in protection to Indian lands. This plan represents a clear attempt by the BLM to pull back from Indian controlled areas and consolidate within those areas populated by non-Indians. The Environmental Impact Statement does not contain sufficient information concerning the area to allow an assessment of environmental impacts. The hidden agenda appears to be the removal of Native Americans from choice coal tracts and then to lease these coal tracts for eventual development.

L72: All rights-of-way passing through the windows will not be approved without compliance with the NHPA. They will be treated like any other surface-disturbing activity.

L73: Application of these two criteria are discussed in detail on pages O-11 to O-14 of the draft. The RMP is a planning document, not a leasing document. It only determines which lands are suitable for potential leasing. Appendix O describes BLM efforts to ensure all coal screens are adequately applied.

L74: The unsuitability criterion refers to federal surface. There are no federal lands within the coal area that are utilized for agricultural crop production. Criterion 2 was erroneously printed in the Draft RMP. The regulations do not include "agricultural crop production" under this criterion. The RMP addresses agricultural lands in NAFI under multiple use screen #10.

L75: See response L33 and Analysis for Single Grave Sites on page O-26 of the draft. We feel this comprehensive study as discussed in response L33 adequately identified possible grave sites within areas of proposed leasing. The Multiple Use Screen No. 17 on page O-26 provides for protection of single grave sites.

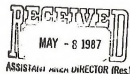
L76: The Bureau does not assess scenic quality of Indian lands.

L77: Annual helicopter and ground surveys conducted for the last seven years by qualified wildlife biologists have located no eagle nest sites or roosts on any of the tracts brought forward in the preferred alternative. A detailed explanation of these two criteria is presented on page O-17 of the draft. If you have reliable evidence to the contrary, please make it available to the BLM.

L78: The protection and management of Indian land are primarily the responsibility of the BIA and Navajo Tribe. The BLM has some mineral enforcement and inspection duties on Indian land and also serves in a mineral leasing advisory role to the tribe. Nothing in the plan changes these responsibilities.

There is no "hidden agenda." The draft clearly describes the Bureau's intention to consolidate public land ownership. BLM is required by law to consider all potential uses of public land including coal leasing during planning.

Nowhere in the plan is it suggested that Native Americans would be removed from choice coal tracts. On the contrary, the Navajo Tribe is in the process of acquiring over 30,000 acres of high potential coal lands in the coal belt as part of the Navajo-Hopi selection. Only 5 coal tracts contain residences. The coal belt SMA was created to alleviate potential problems that might be caused by future unauthorized occupancies.





New Mexico Field Office
P.O. Box 1846 • 610 Gold S.W., Suite 202 • Albuquerque, New Mexico 87103
(505) 242-2015

May 15, 1987

Mr. Ron Fellows, Area Manager
Farmington Resource Area
Bureau of Land Management
900 La Plata Highway
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:

Thank you for providing us with a copy of the Draft Resource Management Plan and Environmental Impact Statement for the Farmington Resource Area. We are pleased to have this opportunity to comment.

The Nature Conservancy is a non-profit conservation organization with some 310,000 members, of which 2,600 reside in New Mexico. Our efforts are directed toward the protection of exemplary natural communities and habitats containing rare or sensitive plant and animal species wherever they occur. Thus, we have a keen interest in natural resource management planning on public lands.

The Farmington Resource Area contains some of the most important natural communities in the state, exhibiting unusually high biological diversity and including a number of extremely rare plants. We appreciate that the most significant of these values known to occur in the Resource Area have been recognized by the preparers of this plan and that alternatives B (Resource Conservation) and D (Preferred Alternative) would adopt appropriate measures to ensure the long-term protection of these sensitive resources. Our comments on the Draft Plan follow.

SPECIAL MANAGEMENT AREAS

The Hogback ACEC. As we stated in our letter of August 13, 1986, the BLM lands immediately northwest and southeast of The Hogback north of U.S. Highway 550 are one of the most important habitats in New Mexico for concentrations of rare plants, probably the second or third most critical area on public lands in the state. The explanation for this is the combination of some unusual soil types coupled with the interfacing of several biotic provinces here which results in a major ecological zone. These rare plants have been recognized in the Draft Plan, and an appropriate ACEC is proposed in the Preferred Alternative.

The Nature Conservancy concurs with the proposed management prescriptions for The Hogback ACEC with the understanding that "limited" ORV designation means that ORV use will be restricted to existing roads and fields within the area. We recommend that BLM systematically evaluate all "trails" in the ACEC to determine if they are, indeed, fully established for vehicle travel and close

L79: Your interpretation of the "limited" designation is correct. The wording of the ACEC prescriptions has been modified to clarify this. The ORV closure was brought forward as a permanent designation in the preferred alternative (see page 1-39).

Mr. Ron Fellows

Page Two

those that are marginal. We urge that the total closure to ORVs for the portion of the ACEC that was closed under emergency regulations in 1985 be continued and be a permanent part of this plan.

Reese Canyon RNA

L80 We fully concur with your Preferred Alternative proposal to designate this area as a Research Natural Area. The final Plan should clarify which non-BLM inholdings will be acquired, as Map B-25 is unclear in this regard. We recommend that the entire area be closed to recreational ORV activities rather than the "limited" designation.

L81 The north-facing slopes south of Reese Canyon to the west of the proposed RNA are known to support nesting populations of gray vireos, a State-listed, Group 2, T&E species. We recommend that the RNA be enlarged to provide protection for this bird which is rare in New Mexico with an apparently declining population in the state. The RNA should be expanded to include Sections 13 and 14 south of Highway 511 to the ridgetop.

L82 Aztec Gila Habitat ACEC. The Nature Conservancy supports the 6,400 ACEC as proposed in the Preferred Alternative, and we recommend that management prescriptions provide for clear signing or other measures to prevent vehicles from leaving existing roads, particularly in the northern of the two units proposed for ACEC status, since off-road use is likely to be a problem here.

L83 A much larger area has been proposed for protection under an Aztec Gila Habitat SMA under alternative B but not the Preferred Alternative. We recommend that the final Plan specify that, rather than dropping the larger SMA entirely, further studies be conducted to focus on the status and population trends of Gilia formosa within the larger SMA as part of the Area-wide rare plant RMP. Recognition of the potential habitat for this species should be in the final Plan. This could be done without specifying precise management prescriptions beyond inventory and monitoring at this time.

L84 Bald Eagle Wintering Area. We recommend adding a management prescription that would prohibit fuel wood gathering on the 1,700 acres that are proposed for ACEC status since this activity is likely to impact potential nest sites.

T&E SPECIES MANAGEMENT

L85 BLM is to be commended for proposing to develop an Area-wide sensitive plant habitat management plan. This should be a high priority. We suggest that a time frame for producing this plan in the near future be specified in the final Plan.

L86 Table 2-1, Federal and State listed species, appears to be incomplete. The following species are known to occur or probably occur in the Resource Area and should be added to the list in the final Plan.

Astragalus monentalis (Monument Valley milkvetch), State-Group 2. Known from The Hogback area.

L80: The map and prescriptions for the RNA were modified to show the correct land status. There is no non-BLM land in the RNA. The "limited" ORV designation was that which was recommended by The Nature Conservancy and NM Resource Survey Program during a coordination meeting in 1986 which determined the RNA boundaries. Based on your revised recommendation the prescription will be changed to "closed" in the eastern half of the RNA.

L81: Based on this and other new information received after the draft was written, the RNA boundaries have been expanded.

L82: Signing will be an integral part of ACEC implementation. Additional clarification has been added to the management prescriptions.

L83: The procedures you recommend have been incorporated into the resource area standard operating procedures and will be incorporated into the final RMP.

L84: A fuelwood restriction has been added to protect winter roost areas.

L85: A sensitive plant HMP will be listed as a funding need in the FY 88 Annual Work Plan.

L86: Astragalus monentalis and A. oocayis have been added to Table 2-1. Atriplex plexantha (succulent dwarf saltbush) is included on Table 2-1 in the draft.

Mr. Ron Fellows
Page Three

Astragalus comelycoides (Arbores milkvetob), State-Group 2. Reeves Canyon.

Atriplex pleiantha, State-Group 2. Known from Navajo Mine just south of the San Juan River. Probably in BLM lands to the north.

ORV AND RIPARIAN MANAGEMENT

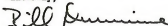
L87 We do have a concern that the ORV policy proposed in the Preferred Alternative is much too permissive, with only 9 percent of the resource area closed or limited to ORV use. Less than 2 percent of the area would be closed or limited for endangered species habitat according to the draft plan. Uncontrolled use of ORVs on public lands is known to result in damage to soils and to vegetation. New Mexico ranks as the worst state in the U.S. for high sediment yields in its river systems, and the FRA contains a high percentage of land vulnerable to soil erosion. The Draft Plan states that nearly all motorized use in the resource area is off-highway rather than off-road (p. 3-3) and only incidental off-the-road use is known to take place throughout the FRA. Now would be the most propitious time to prescribe a "closed except for existing roads and designated areas" policy, before a real problem develops. Once indiscriminate off-road use becomes routine, it will be extremely difficult to enforce closures.

L88 At a minimum, we recommend that all riparian areas be closed to ORV use. Protection of riparian habitats throughout the southwest is one of The Nature Conservancy's highest national priorities, since these fragile areas are among the most threatened of any habitat in the country today. The FRA contains very few riparian acres, and their closure to ORV use should have virtually no impact on public recreation.

L89 In summary, we believe that an enormous effort has gone into compiling this draft plan, and the attention that has been paid to important biological resources is commendable. The Nature Conservancy urges you to place high priority on developing the Area-wide sensitive habitat management plan, and completing all needed inventories. We look forward to working in cooperation with the Bureau of Land Management to achieve the various strategies for public land protection proposed for the FRA.

Again, thank you for the opportunity to present our input. Please retain us on your mailing list.

Sincerely,



William W. Dunneire
New Mexico Public Lands Coordinator

cc: New Mexico State Director
Bureau of Land Management
Santa Fe, New Mexico

L87: See General Response to Comments on ORV Designation. If ORV activity does increase and potential adverse impacts are expected, the Bureau will implement an emergency closure to prevent impacts. In addition, a proactive approach is planned for "open" designations as stated in Appendix B. The educational/information signing concept has proven much more effective than seeking to implement and enforce unnecessary regulations.

L88: The wording of the "limited" prescription has been clarified to indicate that vehicle traffic will be limited to designated roads and trails.

L89: Comment noted.

May 19, 1987

RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Dear Team Leader:

I would like to submit the following written synopsis of my oral comments at the May 5, 1987 hearing in Crownpoint, New Mexico, concerning the Farmington Resource Management Plan (RMP). My comments concerned the effects of the RMP on grazing. These effects result chiefly from three types of changes proposed in the RMP (1) strip mining of certain tracts of land; (2) rangeland improvements; and (3) sale or exchange of public lands.

Strip mining has been proposed for certain tracts of land in the Farmington Resource Area. If land is used for strip mining, it obviously will not be available for grazing for a number of years. With respect to the reclamation of lands after strip mining, it is unclear whether arid land which has been strip mined can ever be made suitable for grazing again. Thus, strip mining causes a long-term and possibly permanent loss of grazing land. And yet, the RMP fails to address the question of alternative grazing areas for people currently grazing their animals on land proposed for strip mining. Also, no provision is made for compensating stockowners who can no longer utilize such lands.

In addition to strip mining, the RMP discusses rangeland improvements. Again, however, no mention is made of the availability of alternate grazing areas or compensation for stockowners while the land is being improved. Moreover, some of the methods proposed for improving rangelands appear to have potential undesirable effects. First, it is questionable whether plowing arid lands and then seeding them with desirable vegetation is a good method of improvement. In the late nineteenth century, large areas of the great plains were plowed and then planted with wheat and other crops. In the 1930's, this area became a dust bowl and many farmers had to leave their land because they could no longer make a living there. Such an outcome appears even more likely in the arid Farmington Resource Area. Also, the use of herbicides, such as tebuthiuron, have been proposed. However, these chemicals have not been proven to be

L90: Refer to Chapter 4, Coal Introduction.

L91: Rangeland improvements are normally developed through consultation, coordination and cooperation with the affected permittee or lessee as directed by BLM Instruction Memorandum WO-83-27. Improvements that are determined to have potential adverse impacts upon livestock operations may receive a low priority ranking for installation or be removed from consideration. If a vegetative treatment is implemented, BLM policy requires a two-year deferment of grazing on the treated area only during the growing season, reducing the need to locate alternate grazing.

During project design and environmental assessment the best method for accomplishing the needed improvement would be determined and analyzed. Plowing and seeding is a viable range improvement method but may not be desirable in certain areas. Plowing and seeding, because of expense and low practicality for this area, is not the preferred method for improving range conditions. Tebuthiuron has been labeled and approved by the Environmental Protection Agency and the New Mexico Department of Agriculture for use on rangelands in New Mexico (see page M-2 of the draft RMP) and its effectiveness in improving livestock and wildlife forage conditions has been demonstrated in the Farmington Resource Area. If used properly, there should be no effects to humans or animals. Standard operating procedures mandate adherence to Department of Interior regulations and New Mexico pesticide laws when using Tebuthiuron.

safe. Furthermore, the RMP does not discuss the long-term effects of herbicides on animals and human beings.

192 The RMP also proposes the sale of exchange of certain BLM lands. The plan merely states that new owners may or may not permit grazing to continue, but once again does not address the issues of alternate grazing areas or compensation to stockowners. Priority in such sales or exchanges should be given to the Navajo Tribe and individual Indians, as was proposed at the hearing by several persons who made comments, to increase the likelihood that persons currently grazing on lands proposed for sale or exchange will be able to continue to do so.

In summary, the RMP makes no provision for mitigating the adverse social and economic impacts of proposed changes on people currently grazing their animals on these lands. These adverse impacts could be lessened by (1) giving priority in the sale or exchange of public lands to the Navajo Tribe and its members; and (2) providing alternative grazing areas or compensation for stockowners who can no longer use their current grazing areas because of strip mining or rangeland improvements. In addition, certain methods of rangeland improvement, particularly the use of herbicides, have potential undesirable effects. These chemicals should not be used until they are proven safe and their long-term effects on animals and humans are evaluated.

Very truly yours,

Diana J. Calais
Diana J. Calais
Attorney at Law

DJC/ce

192: The priorities for land transfers are established by Bureau policy as identified in the Continuing Management Guidance section. Existing users are given consideration with respect to land sales (43 CFR 2711.3-2). This policy applies statewide and is not directed to the exchange zone in the Farmington Resource Area to which your concern is limited. The social and economic impacts of land exchanges are discussed in depth in the Social and Economic Section of Chapter 3 Alternative D.

Post Office Box 1336
Cousins Trading
Gallup, New Mexico 87301

May 22, 1987

Bureau of Land Management
United States Department of Interior
Attn: RMP TEAM Caller Service 4104
Farmington, New Mexico 87499-4104
Gentlemen,

My name is Thomas H. Begau, and I am a full-blooded Navajo from the Chichiltah Chapter on the Checkerboard area. My family and I live on the Southeast 1/4 Section 19, Township North, on Range 19 West N.M.F.M. where we have a house with a well and a two inch water line that extends over one mile from the house. My family consists of my wife and four children.

L93 [We understand that you, the Bureau of Land Management, propose to sell and put on new restrictions. However, there is no provision for us, as Navajos for changes on the land we are living on, and have lived on for many generations. So, we would like first preference in obtaining a clear title to the land that we are living on.

L94 [Frankly, we have paid for the use of the land and to this date, there was never any water development projects initiated or completed, of any kind. In truthfulness, we feel this a fraudulent waste on the part of whomever receives the money that we have expended year after year for the use of this land. Therefore, we demand that some portion of the monies be returned to this mentioned land for improvement.

The United States Government is indebted to us. I have served as a Navajo Code Talker in the United States Marine Corps during Second World War and as a Army paratrooper in the Korean conflict. I served my country well for the sake of the freedom that exists today for all peoples in the United States. So, I believe that my request, which is small in comparison to my selfless service in the military, should be honored.

Your prompt reply will be appreciated.

Sincerely,

Thomas H. Begay
Thomas H. Begay

L93: A tri-party agreement is being developed between the BLM, BIA, and Tribe to establish work groups to resolve, within existing laws, the situation you described. If existing law does not apply, the Bureau may support special legislation.

L94: Water development projects are considered on a case-by-case basis. There are no projects outstanding on Indian use areas.



18

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092In Reply Refer To:
WGS-Mail Stop 423
DES 87-5

MAY 22 1987

Memorandum

To: Area Manager, Bureau of Land Management, Farmington Resource Area,
Farmington, New Mexico

From: Assistant Director for Engineering Geology

Subject: Review of draft resource management plan and draft environmental
statement for the Farmington Resource Area, New Mexico

We have reviewed the statement as requested in the notice included with the document filed on February 26, 1987.

L95

The draft statement discusses surface-water impacts and then comments that surface-water impacts will not be as important as ground-water impacts, but it does not discuss or evaluate specific ground-water impacts. For each of the alternatives, the analysis should at least summarize ground-water impacts that will be significant in decision making.

James F. Devine

Copy to: District Chief, WRD, Albuquerque, New Mexico

L95: Specific ground water impacts would vary depending upon which aquifer, coal formation, and tract is involved. It would be difficult to summarize the impacts discussed in the San Juan River Regional Coal EIS in a meaningful manner, therefore we made no attempt to do so.



May 26, 1987

03.40 ltr.farwington.rmp

19

Mr. Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:

This letter is to provide comments on the draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) for the Farmington Resource Area. The objective of these comments is to review and critique those portions of the RMP/EIS pertaining to the Bureau of Land Management's (BLM's) rangeland management program. Although the RMP/EIS is generally acceptable, several deficiencies have been noted which merit correction or clarification.

1. Ecological range condition is the apparent standard used in the RMP/EIS to assess vegetation condition and to measure the efficacy of the four management alternatives which are presented by the BLM. However, the RMP/EIS is not consistent in its application of ecological range condition. For example, the BLM assumes improved ecological conditions will enhance vegetation productivity, vegetation cover, and soil stability (pp. 3-21 and 3-24). Unfortunately, there is no necessary causal relation between a site's productivity or erodibility and its particular ecological class rating (Hess and White 1986, Rangelands 8:278-281). Indeed, management to attain high ecological condition on one hand and high site productivity on the other are distinctly different objectives on many rangeland sites. Furthermore, productivity itself is a poorly defined term. Is the BLM referring to maximizing productivity for livestock, for wildlife, or for aesthetic or other purposes?

Additionally, what is the BLM's ecological condition objectives? Does the Farmington Resource Area consider good or excellent ecological condition rangelands an ultimate goal? Or does the BLM foresee fair or good condition rangelands as sufficient to meet their goals? Ecological range condition is not a panacea for resource problems or an intuitively superior management objective. Yet, the RMP/EIS relies upon the concept of ecological range condition as though it were a cookbook recipe for the resolution of natural resource problems. We strongly recommend the BLM clarify its use of ecological condition in the RMP/EIS. We also suggest the RMP/EIS succinctly state its objectives--is the BLM's ultimate objective to enhance resource conditions for one or more multiple uses or is the goal of the BLM to return vegetation condition to some hypothetical state where man's presence and impact on natural systems is minimized. If the BLM's ultimate objective is the former, please explain the rationale for utilizing ecological range condition (as opposed to range condition predicated on wildlife, recreation, watershed, or livestock needs) in the RMP/EIS.

L96: The Society for Range Management's guidelines and terminology for range inventories and monitoring defines ecological condition or status as "the present state of vegetation and soil protection of an ecological site in relation to the potential natural community for the site." Therefore, when we talk about "improved ecological condition" (no reference to ecological class rating) we are referring to improved vegetative diversity and cover as well as improved soil conditions, assuming that the climax community for a site consists of the most diverse and stable species composition. These improvements normally result in a more productive site than a lower seral stage.

We are using the classic definition of productivity, which is "the rate of production per unit area in terms of weight or energy..." without regard for the use(s) of the vegetation produced.

L97: The response to comment L96 clarifies the definition of ecological condition that was adopted for use in the draft document. The goals of the Farmington Resource Area are not predicated as much on the establishment of good or excellent ecological conditions as on improving those lands which are in unacceptable condition or are threatening to decline to unacceptable levels. It is beyond the scope of this RMP to identify individual site objectives. Future allotment-specific activity planning will analyze the needs of livestock, watershed, wildlife, and other uses to determine the condition class(es) the BLM wants to attain.

2. The RMP/EIS graphically displays projected (long-term) ecological range conditions for each of the four management alternatives. Except for Alternative D, the BLM's preferred alternative, range conditions projected do not appear to significantly deviate from those projected for the no action alternative (continuation of current management). We are puzzled why the BLM's preferred alternative performs so well in comparison to alternatives A, B, and C. Specifically, the BLM's preferred alternative would increase acres in good and excellent range condition by more than 100 percent over the level projected for any of the remaining three alternatives. The preferred alternative would neither implement the lower stocking of Alternative B nor invest the magnitude of range improvement dollars projected in Alternative C. Yet, the BLM's preferred alternative appears to achieve ecological miracles by combining parts of each. We would like to know how a compromise between protection and production alternatives realizes such significant improvements in ecological range condition.

We believe it is important the BLM explain the scientific basis for arriving at its ecological range condition estimations.

3. The RMP/EIS projects significant grazing reductions on selected allotments. We are concerned why such reductions are required in the magnitude proposed. Why has the BLM waited until now to correct allegedly gross overstocking of grazing allotments? We understand the Bureau of Indian Affairs has had authority over many of these lands. Yet, this does not explain nor exonerate the Federal government from responsibility for the condition of these lands. Furthermore, it is our understanding some of the overgrazed allotments are free-use allotments--e.g., allotments where no grazing fees are assessed. How does the BLM intend to finance range improvements on these allegedly over-stocked and poor condition rangelands? Will the BLM utilize appropriations other than grazing fee receipts to pay for projected range improvements on these allotments? If not, what rules of equity will determine allocation of grazing fee receipts amongst allotments which have paid and those which have not paid grazing fees?

4. The RMP/EIS projects up to 54,157 animal unit months (AUMs) in the Chaco rangeland management area to be transferred from BLM administration in the long term. How will the loss of these AUMs effect the long-term stocking projections made for the management area in Table 1-37? Will administrative loss of AUMs significantly affect projected stocking reductions or proposed rangeland improvements? The RMP/EIS offers no answer to these questions.

5. The RMP/EIS states grazing decisions will be made in accordance with Section 8 of the Public Rangelands Improvement Act of 1978. We support the BLM in their adherence to this law. However, we recommend the BLM include in the final RMP/EIS a statement of the BLM's New Mexico Section 8 policy and a list of Section 8 participants.

L98: Alternative D "incorporates concepts proposed in both the resource conservation and resource production alternatives as well as actions intermediate between the two." This balance of resource uses and combination of management actions would be responsible for the projected improvements shown in the draft RMP. The analysis used by BLM specialists to arrive at the specific figures used to construct the graphs is on file at the Farmington office and is available to the public.

L99: The animal unit months shown are based upon licensed use and projections from rangeland inventory data. Actual stocking rates will be determined after monitoring data are collected and analyzed for actual livestock use, utilization of key forage species, trend in rangeland condition and climatic influence. Although the difference between the licensed use and inventory figures appears to indicate significant overstocking, the current level of active use is often substantially below preference levels.

Most rangeland improvements will be financed through use of range betterment funds (grazing fee funds) based upon the management category of the allotment, the benefit-cost ratio of the improvement and permittee contributions. Highest priority is placed on improvements for I category allotments with a positive benefit-cost ratio and permittee contribution, in the form of labor, materials or cost of improvements. Improvements proposed for allotments with significant free-use will be ranked together with improvements from other allotments based upon the above factors.

L100: If allotments are transferred to agencies or individuals that adopt the BLM's assessment of correct grazing levels, administrative loss of AUMs will not significantly affect projected stocking reductions.

On pages 1-36 and 1-40 of the draft RMP we state that range improvement funding for allotments within the exchange zone would be limited to those projects that can be depreciated before exchange or disposal of public land occurs, therefore there should be no significant effect to proposed rangeland developments.

L101: See Chapter 4 of this document for a statement of Section 8 policy. The full policy and a list of participants is available at the Farmington Resource Area Office.

Mr. Ron Fellows, Area Manager

May 26, 1987

Page 3

We appreciate the opportunity to comment on the RMP/EIS. If further clarification of our comments is required, please contact Mr. Ron White, division director, Agricultural Programs and Resources, at 646-2642.

Thank you.

Sincerely,


William F. Stephens
Director/Secretary

WFS/kh

May 20, 1987

Mr. Ron Fellows/Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Re: Farmington Resource Management Plan

We do not understand the exclusion of Rattlesnake Canyon (7.) from Alternatives B or D. The area obviously possesses special values in its botanical and zoological population to warrant Special Management status. The general scenery of its rocky canyons, coupled with a closer look at the ponderosa stands, oak thickets, wild flowers, abundant bird life, including a sighting of gray vireos there on July 10, 1986 by several members of the Four Corners Bird Club, are sufficient to qualify this area for SMA treatment and to be included in any selected alternative.

Three to four gray vireos were feeding and moving through juniper/pinon in Section 9 of Range 8W, as indicated on the enclosed map. Because of the season, it was felt this was a family group probably hatched in this general area a few weeks previously.

In addition, club members have not studied the apparently more extensive ponderosa stands to the southwest of this entrance road (visible from the same Section 9 above), but we feel sure the distant stand is large enough to support birds not otherwise known as breeding birds in the surrounding typical pinon/juniper woodland. If BLM personnel have not personally inventoried that area for bird life, there is no way of knowing the actual bird population or whether SMA status is warranted or not, based on that information. The area should not be excluded from SMA status because of insufficient information.

Thank you for your consideration,

THE FOUR CORNERS BIRD CLUB

Alan P. Nelson
Audra A. Nelson
Dicki Hesperance
Bob Hesperance
Judith D. Zitzler
Ray D. Zitzler

Pat Hesperance

L102: At present there is not sufficient information to indicate that Rattlesnake Canyon supports communities different from other similar canyons in the resource area. Such areas are presently given special consideration in the continuing management guidance for the right-of-way, oil and gas, and forestry program. If future inventory and monitoring indicate a need, the areas you mention will receive special attention in an amendment to the existing Pump-Middle Mesa HMP.

Re: Draft FRMP March, 1987

In addition to the enclosed typed page, I have the following information.

1. Judy and Roy Pritchard has a July 9, 1983 record of gray vireo in Rattlesnake Canyon.
2. On May 25, 1987 gray vireos responded to taped calls at Rattlesnake Canyon.
3. On May 24, 25, 1987 the following male birds were singing in Ponderosa/Oak at Rattlesnake Canyon: Wester Tanager, House wren, Hermit thrush, Pygmy nuthatch, Cassin's finch. These species are not expected in the surrounding pinyon/juniper habitat as singing (i.e. nesting) birds, thus indicating the ponderosa habitats there provide for several species not found nearby.
4. In the creek bed of Rattlesnake and tributaries were found singing Blue grosbeak and Green-tailed towhee. I have encountered Blue grosbeak on BLM pseudo-riparian habitat in the Largo Canyon drainages, but not green-tailed towhee. Several streambeds had clear-running water in the Rattlesnake Canyon area.
4. In Section 21 (possibly 28) Range 8W, a pipeline crosses east-west, above ground. On the east side of the north-south drainage a small canyon just south of this pipeline (also just south of a well site) are 3 of the largest Rocky Mountain junipers I have ever seen. From across the canyon I had thought they were Douglas Fir, but I was pleased to find such tall junipers.

Alan P. Nelson
325-8619

May 20, 1987

Mr. Ron Fellows/Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Re: Farmington Resource Management Plan

Dear Sir:

Here are my thoughts on the above referenced plan:

Page A-4- Wildlife WL-1.2

"Designate bald eagle habitat areas... and La Plata rivers..." and Page B-68- the map shows lands from the Animas River valley eastward to the Carson National Forest.

L103 [Comment: Are none of the bald eagle habitat areas along the La Plata River valley to be considered? At least as many as six bald eagles can be seen regularly along that valley from November to March.

L103: Observations made since WL-1.2 was approved indicate that none of the important use areas in the La Plata Valley are on public land.

Page A-4- Wildlife WL-2.2/2.3

"...mechanical treatment of sagebrush and pinon-Juniper woodlands for wildlife habitat improvement."

L104 [Comment: There is documentation demonstrating it is livestock overgrazing which changes wildlife habitat, by altering the vegetative cover. Mechanical treatments also alter the vegetative cover, benefitting certain game animals, but certainly not all wildlife. Following the treatment, if livestock grazing resumes at the pre-treatment level, there will be no long-term solution. Overgrazing must be dealt with.

L104: This decision refers to wildlife habitat improvement projects and not projects to improve livestock carrying capacity. However the impacts of livestock grazing are considered in planning and evaluating all such projects. Stocking levels would be adjusted in order to ensure that desired improvement objectives are achieved.

Page 1-23 to page 1-48

I have prepared the following chart from the FRMP:

PLAN ALTERNATIVES

	ACREAGE OF SMA AS A PERCENTAGE			
	A (no action)	B (resource conservation)	C (resource production)	D (preferred alternative)
Public Surface				
Estate:	43,637	409,000	42,599	98,388
1,508,450	2.9%	27%	2.8%	6.5%
Adding Sub-surface minerals:	1.0%	9%	1.0%	2.2%

Page 1-38

"Priority has been set for acquisition areas... as follows: (1) non-BLM lands (17,963 acres) within SMA's...."

L105 [Comment: If lands are to be acquired, has that acreage already been included in the totals listed in the charts? If not, the percentages of lands under each alternative could change significantly and there could be considerable bias either direction if that is not made clear.

In an attempt to determine from BLM acreages of all SMA's, I have these figures: Total acreage of SMA's-- 593,651 acres; including only BLM in #17-513,011 acres; not including Coal Belt- 435,066 acres. Some SMA's (#31, 36 and 37) have as much as 1/2 the acreage currently not administered by BLM.

L106 [Some SMA's (#28) overlap into other SMA's (#5, 8, 26) so it is difficult to determine which acreage to consider. SMA's 29, 30, 31, 34 and 36 do not have any stated acreage-- but I estimated the acreage from the maps.

Clearly, though this FRMP cannot be simply a numbers "game," the only plans with significant emphasis for long-term conservation/preservation are plan alternatives B and O. A combination of those 2 alternatives is my preference as the only way to forestall continued degradation of the values identified as significant and worthy of special management.

L107 [Comment: I do not think it proper to include the two wilderness areas in any of the proposed plans. They are already designated by Congress, and if their respective acreages are included in any plan it would appear BLM is planning to deal with that acreage in a manner inconsistent with present policies. Such is not the case, since Congress made the decision already.

L108 [Comment: #27 River Tracts. It is correct to place these areas into an SMA. The watershed of Largo Canyon has many acres of similar but less extensive riparian growth, especially in Largo Canyon, Cereza, Companero, Delgadito and Jesus Canyons. Riparian areas on BLM lands in this drainage should also be placed into SMA's. The deciduous trees/shrubs there provide habitat for many species of wildlife unable to live in drier habitats. Several springs provide a spot for wetland plant species in very limited areas. All such places deserve protection from livestock, ORV abuse or any other uses not conducive to their preservation.

Alan P. Nelson
Alan P. Nelson
710 W. 27th St.
Farmington, New Mexico 87401

APN:sn

L105: Yes. The total SMA acreage includes both public and non-BLM acreage to be acquired.

L106: Your preference has been noted.

L107: The Continuing Management Guidance section, page 1-18 of the Draft describes the Bisti and De-na-zin Wildernesses as SMAs designated by Congress. The Bureau will continue to manage these SMAs and their respective acreages as directed by law, regulations, policy and management plans regardless of the alternative selected.

L108: The areas which you describe do not meet the definition of a "riparian area" as defined in BLM Riparian Area Management Policy. It is unfortunate that these areas were not mentioned as potential SMAs when the public was asked to provide input to the proposed issues in 1985. At present we lack the site-specific data needed for evaluation as an SMA. Until such time as the data can be gathered, we will treat such areas as special habitat features and manage them under continuing management guidance.

May 29, 1987



BMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NH 87499-4104

We have reviewed the Farmington Draft Resource Management Plan and Draft Environmental Impact Statement, and are concerned with the lack of consideration given to the potential eligibility of the San Juan River and its major tributaries, the Animas River and La Plata River, for wild and scenic river designation.

As the nation's principal river saving organization, American Rivers is deeply concerned with the fate of magnificent San Juan River System. Though the BLM appears to own little of the land directly adjacent to the rivers in question, it remains the planning responsibility of the Farmington Resource Area to evaluate potential wild and scenic river candidates which lie within their proclamation boundaries.

L109

The portions of both the San Juan River and Animas River in New Mexico have been identified by the Nature Conservancy as "Priority Aquatic Sites For Biological Diversity Conservation" in their document of the same name, dated March 1, 1985. It is important that these valuable resources receive the attention that they deserve from the Farmington planners. As was stated in our letter of April 22, 1987, Section 5(d) of The Wild and Scenic Rivers Act instructs all federal agencies to evaluate potential wild and scenic rivers in "all planning for the use and development of water and related land resources." 16 U.S.C. sec. 1276(d). This responsibility was formally recognized by BLM administrative direction issued in December of 1979 from the Assistant Director's office which calls on all BLM Offices to evaluate potential wild and scenic rivers according to criteria "based on the Wild and Scenic Rivers Act, and the joint USDA/USDI guidelines, and other pertinent factors." Section 1h.

As a follow up to our letter of April 22, 1987, we are including with this letter some comments which may prove useful in an eventual eligibility analysis. If this office can be of further assistance, please contact me or James Fosburgh.

Sincerely,

Kevin J. Coyle
Director of River Protection

L109: As you are aware the Nationwide River Inventory (1982) conducted by the Department of the Interior did not select either the San Juan, Animas or La Plata Rivers as potentially eligible for study as candidates for Wild and Scenic River status. Thus, a study was not undertaken during resource management planning.

The Bureau does recognize that re-inventory and evaluation of rivers for potential eligibility may be needed to account for future study and management guidance as well as environmental change. Currently, the City of Farmington and San Juan County are in the process of river and open space planning. Two Bureau employees function as liaisons in these efforts to ensure consistency with local government land-use plans.

Narrative has been added to Chapter 1, Continuing Management Guidance, Outdoor Recreation, Program Direction to address your concerns.

NEW MEXICO NATURAL HISTORY INSTITUTE

A 14-month Commission

23

St. John's College Campus
Santa Fe, New Mexico 87501

30 May 1987

Don Fellows, Area Manager
Farmington Resource Area, BLM
Caller Service 4104
Farmington, NM 87499

Dear Mr. Fellows:

For the Institute (a small, state-wide group of biologists interested in protection of natural values) I comment on the Draft Farmington RMP.

L110 [Livestock, even more than mineral activities, have destroyed the natural scene in the Resource Area. You know this, and modifications proposed in the San Juan Grazing EIS and in the RMP EIS are moves in the right direction. But they are insufficient; these proposals will not restore productivity of the land in foreseeable centuries. Year-round grazing even more than the number of animals seems to be at fault. You face great difficulties. But on behalf of the land we plead for the Bureau to take a strong hand: at least Alternative B's reduction in stocking, and a shift wherever possible to rest-rotation and longer-term rest periods.]

L111 [In general we are impressed by special management areas in the plan. There's not a lot left in the San Juan Basin that is pristine, but you've identified many of the best sites for protection.]

L112 [On the other hand, we are less than impressed by the degree of protection suggested in several of the management prescriptions for SMAs, especially the inadequate ORV regulation and the lack of mention of livestock exclusion even in the areas in which preservation of vegetation and soil is the paramount goal. ORV regulation in the whole resource area—not just in SMAs—is inadequate. If you're right that ORV use is still light, then now's the time to prevent its expansion. We do not think that your repeated statement that vehicular off-road travel has little or no effect on paleontological resources is correct, but in any case, why not make become (or continue) correct by excluding vehicles from all the fossil-rich areas? For the SMAs it is hard to judge what your "limited" ORV designations will mean until we see maps of what you consider to be the existing roads and trails. In general in the larger SMAs "limited" use seems right, but may involve closing some existing trails; in smaller areas "closed" is preferable.]

L113 [One Research Natural Area designation is not enough to protect natural samples of the varied communities of the RA. We suggest that Jones Canyon, part (a section?) of the Hogback, one or more river tracts that include wetland communities, and a grassland area (as in Ah-shi-sle-pah) be designated RNAs. We want to suggest RNA designations in additional community types, but have not had opportunity to find appropriate sites. We think that with your knowledge of the RA, you could and should make additional designations. Cattle should be excluded from RNAs—although in some instances this may not be immediately possible.]

L110: Comment noted.

L111: Comment noted.

L112: It is not the intent of the Bureau to restrict or exclude uses that are compatible with SMA goals. The existence of livestock or vehicles in itself does not warrant their exclusion. The management prescriptions cited for each SMA are area-specific and do not address blanket restrictions that may unnecessarily hinder public enjoyment or management flexibility. Refer also to General Responses to Comments on ORV Designations.

It is unfortunate that your suggestions were not made earlier in the planning process when the public was asked to nominate Special Management Areas.

L113: We have no data to indicate that Jones Canyon contains communities significantly different than similar areas in the resource area. The Hogback and river tracts will be protected by other designations (Hogback ACEC and River Tract SMA) whose prescriptions will recognize their unique resources. The Ah-shi-sle-pah WSA contains very little grassland. That which is present is not unique when compared with the many acres of similar vegetation in the general area of the WSA including Chaco Culture National Historical Park. Land in the park is not grazed nor is it subject to the existing mineral claims and rights that are found in Ah-shi-sle-pah. Other than those presented by the Nature Conservancy, no site-specific proposals for RNAs were made during the development of the draft plan. The FRA is not ignoring the need for RNAs. However without exact proposed locations and supporting data an analysis of conflicts with prior existing rights cannot be conducted. If you have data and maps to support your recommendations, please convey that information to the BLM.

Our remaining comments concern particular SMAs and, under #9, the southern part of the resource area.

- L114 3. Simon Canyon. The upper part should be closed to vehicles to protect wildlife. State section 16 should be acquired and part added to the area, to better complete the watershed holding. Otherwise we praise your management plans for the area.
- L115 5. Carracas Mesa should be closed to ORVs except for one or two access trails, for the sake of wildlife and midland recreation.
- L116 6. Jones Canyon should be closed to ORVs and the best (oldest?) area of pinyon-juniper should be designated an RNA and closed to livestock.
- L117 7. Rattlesnake Canyon should be added as an SMA in the preferred alternative even though much of it is far from natural, in order to achieve all of alternative A's stated objectives. You will remember that conservationists refrained from pushing this area for wilderness designation in 1979--in spite of its outstanding recreational opportunities--on condition that it receive administrative protection. This you promised in NW Wilderness Study Area "Proposals" and "Decisions" (March and November 1980).
- L118 8. Herrero Canyon: we praise your strong management prescriptions. We recommend inclusion of all the unroaded watershed, extending westward through almost all of Sec. 2.
- L119 9. Red Rocks Bluff. We are concerned that valuable sites will be lost in the proposed land trades, even though such trades do seem a good idea in general. Red Rocks Bluff is one parcel that shouldn't leave public ownership. There are undoubtedly others; for instance, there should be protection of biological communities in the vicinity of Whitewater Arroyo near Two Wells or Van der Wazen.
- L120 13. Ah-shi-sle-pah WSA should be recommended for retention and, in spite of the coal, for protection. We are particularly interested in the grassland component, but lichen and forb communities and fossils in the badlands are also valuable.
- L121 19. Chacra Mesa. Recreational values add importantly to cultural resources here. ORVs should be excluded.
- L122 20. Lazuna Sooa Mesa. Recreational ORVs should be banned (though off-road travel for wood harvest may be necessary) to protect vegetation, soil, and wildlife.
- L123 24. Horzback. About 600 carefully chosen acres--Sec. 287--should be designated as an RNA in recognition of the unique biological communities. State section 36 (N 4) should be acquired and added. Most vehicle trails should be closed to protect plants.
- L124 In Map B-24 of the Draft as in several other SMA maps, land ownership does not quite match that shown in the colored RA map.
25. Reese Canyon RNA. It is difficult to learn from the Draft EIS

L114: The upper 1,780 acres of Simon is currently closed to vehicles as per the Simon Canyon Recreation Area Management Plan (1984). Your land acquisition suggestion will be considered in updates of the activity plan.

L115: Your comment is noted. An activity plan for the area will outline the details of administration of vehicles.

L116: A "closed" designation is proposed on page B-14 of the draft. The SMA designation with the prescribed management actions is considered adequate to protect the resource values identified.

L117: ACEC potential was evaluated during the RMP phase after being brought forward from the San Juan MFP for further study. The finding was that administrative protection through continuing management guidance is adequate to protect public land values currently existing. ACEC consideration does not weigh recreational values as a criterion but does weigh natural values which were assessed at less than desirable. The existing recreation values are very similar to those found in the nearby Negro and Simon Canyon SMAs.

L118: The boundary has been adjusted as recommended.

L119: Your concern is noted. However, the area is not being considered for inclusion in the proposed RMP.

L120: The WSA has been recommended as unsuitable for wilderness designation due in part to surface coal deposits as well as selection of about one-half the area by the Navajo Tribe as part of the Navajo/Hopi Relocation Settlement Act. This also complicates other SMA designations.

L121: Recreational access will be provided through limiting vehicles to existing roads to protect important cultural resources.

L122: There is no recreational ORV activity taking place in this SMA nor is any likely, therefore no restrictions are needed. This activity is also compatible with the SMA goals.

L123: The entire area has been designated as an ACEC to protect the unique resources found there. This designation was based on recommendations made by The Nature Conservancy. Roads and trails will be closed as necessary as part of the "limited" ORV designation listed under Management Prescriptions. The N/2 of section 36 has been placed on the priority exchange list.

L124: Please see the response to comment L135.

L125 what you think a research natural area is. In this one you include a paved highway and access roads and ORV trails, two major pipelines, drill pads, grossly unnatural boundaries, and grazing on 95% of the acreage (assuming that the fenced 80 acres will exclude livestock on 5%--that is not said). The boundaries make no sense to us with regard to roads and topography. Map B-25 assigns sections 7 and 18 of T32N 87W to T32N 88W, and shows land ownership different from that in other sources such as the colored RA map. For instance B-25 shows over 300 acres of public land in Sec. 8; other maps show 40 acres. Which is right? And what inholdings to you mean to acquire?

L126 On the other hand we praise (1) the concept of a research natural area here and (2) the strong prescriptions proposed for the 80 acres. A natural area could be created in Secs. 12-14, from the cliffs above NM 511 southward. And protection for the Los Pinos escarpments with their *Astragalus ocalycis* is a good idea, though RNA designation of the proposed tracts--separated by roads, pipelines, river, and private lands--seems dubious. Garcia Canyon (on Sec. 18-19 line and westward) would be an RNA of biological worth, were it closed to vehicles and livestock.

L127 26. Aztec Gilia habitat. We think that the ACEC boundaries here should be quite specific for the target species. When so drawn, vehicles should be excluded. If (as we assume) the badlands vegetation here is quite different from that in Fossil Forest RNA, one tract should be considered for RNA designation, and livestock excluded.

L128 27. River Tracts. As mentioned above, a tract--even if it has to be less than 40 acres--should be designated an RNA to protect a wetland community. Then all entry should be prohibited. All riparian areas should be closed to off-road vehicles.

L129 32, 33, 34. We are certainly pleased to see plans to recognize and to protect geological type areas.

L130 29, 31, 36. We think it a mistake to omit these areas from the Preferred Alternative. Granted that they are not areas of concentrated fossils, and that they are difficult to protect. But designation would serve at least two purposes: to alert your office in future decisions that ground-disturbing activities here require protection or mitigation for fossils, and to promote concentration of land acquisitions here, for paleontological and other reasons. We strongly recommend that these areas be designated as in Alternative A.

L131 35. Fossil Forest RNA. It's all been said before, but we want to emphasize again the importance of this splendid area: that it should remain in federal hands, that it should not be mined, that fossils should be rigorously protected (not by merely "monthly" patrols as stated on p. B-82). Twenty or more new fossil species have come from this tract; almost 200 in-place stumps and many other fossils here allow a unique opportunity to study Cretaceous communities.

Sincerely,


Robert S. Peterson
Secretary

L125: RNA boundaries follow legal land descriptions. The RNA map will be modified to correct reproduction errors and incorporate new information (see comment L81). The definition of an RNA in the Federal Regulations (43 CFR 8223.8-5) makes no mention of excluding areas with man-made features or grazing. The presence of unusual plant or animal association or a threatened or endangered plant or animal species are sufficient reason for designating an RNA. At present it has not been demonstrated that livestock are a threat to species for which the RNA was created. If future studies indicate a problem then livestock adjustments will be examined.

L126: See responses to comments L125 and L81.

L127: The ACEC boundaries are specific and are indicated on Map A1-25. As stated on page A1-57 vehicles will be limited to existing roads. There are insufficient data at this time to comment on the effects of grazing on this species. Studies of this and other potential impacts will be a part of the sensitive plant Habitat Management Plan proposed by the plan.

L128: The San Juan River Basin Habitat Management Plan provides for the protection and fencing and protection of selected areas in the river tracts. The management prescriptions for the river tracts limit vehicles to designated roads and trails.

L129: Comment noted.

L130: Day-to-day management practices such as the environmental review process for surface-disturbing activities has been assessed as adequate to protect the values identified.

L131: A long-range study is currently being prepared to determine the future use of the area. You are encouraged to participate in this study.

NEW MEXICO BLM WILDERNESS COALITION



PO Box 712
Placitas, NM 87043
31 May 1987

SUPPORTING ORGANIZATIONS

CARESON COVETES
GILA WILDERNESS COMMITTEE
NEW MEXICO WILDERNESS
STUDY COMMITTEE
SOUTHERN UTAH WILDERNESS
ALLIANCE
NEVADA OUTDOOR RECREATION
ASSOCIATION INC.
NATIONAL AUDUBON SOCIETY
NEW MEXICO DIVISION
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NATIONAL PARKS AND
CONSERVATION ASSOCIATION
FRIENDS OF THE EARTH
SIERRA CLUB
WILDERNESS SOCIETY
PROJECT USUTAH/ANM
UTAH WILDERNESS COALITION

Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

Dear Mr. Fellows:

The New Mexico BLM Wilderness Coalition has two serious concerns with the Draft Farmington Resource Management Plan: 1) lands identified for disposal; and 2) the unlimited-motorized-vehicle-use policy recommended for much of the resource area.

With regard to the first item, the Coalition is particularly disturbed that Ah-shi-sle-pah and the Fossil Forest have been identified for possible disposal. Also, blanket disposal of all lands south of Highway 44 seems a bit arbitrary.

Your proposed policy with respect to motorized vehicles is strongly opposed by the Coalition. The fragile environment of the Farmington Resource Area cannot survive unconstrained motorized use. We urge you to follow the lead of the Rio Puerco Resource Area and limit vehicles to existing roads and trails.

Sincerely,

Jim D. Fish
State Coordinator

L132: Most of the WSA has already been transferred out of Bureau administration due to the Navajo/Hopi selection. There is nothing arbitrary about the land consolidation concept which incorporates the exchange zone as a public land management tool that is being utilized throughout the state. It is also consistent with plans of the State Land Commissioner and Navajo Tribe.

Refer to L120 and L131 for responses to comments on Ah-shi-sle-pah and Fossil Forest.

L133: See General Response to Comments on ORV Designations.

3005 Calle Quieta
Santa Fe, NM 87505
May 31, 1987

Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

Dear Ron:

After reviewing the Draft Farmington Resource Management Plan and Environmental Impact Statement (DRMP/EIS), I have the following comments and concerns.

L134 [The entire Farmington Resource Area is rich in unique features such as paleontological resources, habitat for rare plants, historic sites, religious sites and magnificent topography. I was pleased to see all the special management areas (SMAs) that were identified in the document. They will help provide adequate management for these distinctive lands.

L134: Comment noted.

I was especially pleased to see SMA #30, Bisti/De-na-zin. It will expand the protection offered by the two wilderness areas. Management of the SMA as an area of critical environmental concern (ACEC) will enhance the opportunities offered in the tract of land.

L135 [I am concerned about identifying the southwestern part of the Farmington Resource Area for disposal. I realize for good land management, it is important to block up patterns of land ownership. However, considering the special resources in the Farmington Resource Area, I do not think it appropriate that all lands south of Highway 44 be identified for disposal. I would prefer to have each parcel evaluated on its own merit, and then either traded or kept.

L135: The significant resource values will be protected through SMA status in the exchange zone.

L136 [I do not understand why you have identified the Fossil Forest and Ah-shi-sle-pah for disposal if Congress removes the special management status given in the San Juan Basin Wilderness Protection Act of 1984. The areas are special, one is a research natural area and the other a wilderness study area. Certainly they should be kept and managed for their special features even if Congress removes the management status created in the bill. At a minimum they should both be considered as ACECs if their present status is changed.

L136: Refer to responses L120 and L131.

I do not understand the rationale for leaving over 90% of the Farmington Resource Area open to unconstrained motorized vehicle use. With all the roads and two tracks already in existence, the Farmington Resource Area should have a limited-motorized-vehicle-use designation. If a permittee or leasee needs an open designation for his use on his permit or lease, that could be written into the agreement. The general public does not need the open designation.

L137

I feel a limited-motorized-vehicle-use designation would provide for better management and soil protection. An open-motorized-vehicle-use designation will only create more erosion, since vehicles will destroy additional vegetation as their drivers proceed to go wherever they please, no longer being confined to existing roads and trails. I urge you to reconsider the open designation now being advocated in the DRMP/EIS.

Thank you for the opportunity for comment on the document.

Sincerely yours,



Judith S. Bishop

L137: See General Response to Comments on ORV Designations.



MID-AMERICA PIPELINE COMPANY
A MARCO COMPANY

Fred TANACS
PRESIDENT
(416) 593-3794

26

1 June 1987

Bureau of Land Management
RMP Team Leader
Caller Service 4104
Farmington, New Mexico, 87499-4104

Dear Team Leader:

We have reviewed the Draft Farmington RMP/EIS.

We note that in Alternatives A, B and D, acquisition of non-BLM inholdings is proposed for the Angel Peak Recreation Area.

According to Map B-4 on Page B-11 of the RMP, the major non-BLM inholdings are most of Section 6, T26N, R10W, which is shown to be private land.

Highway 44 crosses the southwest part of Section 6. We have two pipelines parallel with the highway, lying on the northeast side of the highway. There may be other pipelines and overhead powerlines parallel with the highway also. the presence of these lines and the highway itself makes a de facto right-of-way corridor.

We question that the existence of this corridor is consistent with the aims of the Recreation Area, and suggest that all of Section 6 southwest of a line 300 feet northeasterly of the northeast right-of-way line of the highway be excluded from the Angel Peak Recreation Area.

That part of Section 6 lying southwest of the highway is physically severed from the rest of the section by the highway and should be excluded from the Recreation Area anyway. This exclusion and the exclusion suggested immediately above would render the Recreation Area unencumbered by the corridor.

If the non-BLM inholdings are to be acquired by land exchange, it is understandable that a more favorable land trade can probably be obtained, if all the private land in the section is exchanged and passes into BLM ownership. However, this does not mean that all the exchanged land needs to be included in the Angel Peak Recreation Area.

Bureau of Land Management

RMP Team Leader

1 June 1987

Page 2

If the non-BLM inholdings are to be acquired by purchase, we do not think it necessary to acquire any land not physically contiguous with the Recreation Area, or occupied by existing facilities along the Recreation Area border. Consideration should be given to the reasonable future possibility of additional facilities in that border area. A 300 foot strip should be adequate for the existing and future facilities.

L138 [In summary, we suggest and urge that the boundary of the Angel Peak Recreation Area in Section 6, T26N, R10W, be a line lying 300 feet northeast of the northeast right-of-way line of Highway 44.

Thank you.

Sincerely,


S. F. Isaacs
President

L138: The boundary of the recreation area has been in place for many years and the rights-of-way are considered compatible. However, your suggestion as well as management prescriptions will be closely re-examined during activity level planning for the SMA.

JHL:SFI:pjc

cc: R. E. Penderson

L. D. Gross

C. N. Kiddoo

File: Location Code 28-05-09-03



United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202



27

In Reply Refer To:

1586M

June 1, 1987

4441
6009.2

MEMORANDUM

TO: RMP Team Leader
Bureau of Land Management
Farmington Resource Area

FROM: Peter A. Rutledge, Chief
Federal Programs Division
Western Field Operations

SUBJECT: Farmington Resource Management Plan and
Environmental Impact Statement (RMP/EIS)

We have reviewed the draft RMP/EIS for the Farmington Resource Area and are submitting several comments and suggestions (attached) for your consideration. We appreciate this opportunity to participate in the review of the document and look forward to seeing the final RMP/EIS when it is published.

If you have any questions concerning these comments or any other matter relating to the RMP/EIS, please feel free to contact Floyd McMullen in Denver at (303) 844-2451 or FTS 564-2451.

Attachment

OSMRE REVIEW
OF THE
FARMINGTON DRAFT RMP/EIS

Comments/Suggestions:

- L139 Pages 1-41 through 1-48, table 1-12. We suggest you reexamine this table concerning the actual comparisons of the alternatives being offered. For example, the wildlife section for alternative D (page 1-12) infers that important bald eagle roosts would only be protected by the preferred alternative, when in fact, alternative B offers exactly the same protection (see page 3-27). Both the reader and the decision-maker would be better served by a more factual comparison of the impacts in this table.
- L140 Page 1-48, table 1-12, social and economic conditions. Statements concerning the potential to "arouse social concerns among the Navajo people" from land ownership adjustments in alternatives 8, C, and D do not appear to be supported in the chapter 3 text. If you are referring to the Navajo Occupancy Resolution Program introduced on page 1-10, you should make it much clearer, and the topic should be addressed in the impact analysis.
- L141 Page 2-2, climate. The EIS discussion concerning prevailing winds, while including wind speed, failed to mention wind direction. Also, references for the climatological data should be included to insure a complete record for the reader.
- L142 Page 2-14, air quality. The discussion concerning air-quality standard compliance should be expanded to identify the sources of air monitoring data, the location of ambient monitoring stations, and the pollutants that were measured. In addition, we suggest that a more recent "Air Quality Bureau Annual Report" be used for the data being displayed in the second table.
- L143 Page 2-17, wildlife. Please expand the discussion concerning wildlife habitats to identify other important habitats that would be affected (perhaps improved) by the management plan. Raptor and riparian discussions should be expanded to provide the reader with rough estimates of the potential extent of habitat (i.e., bluff/cliff features, wash habitats, etc.). The EIS should mention the number and quality of springs in the area and their importance to wildlife. The fish communities associated with the San Juan, Animas, and La Plata Rivers would be affected under the various alternatives and should be discussed.
- L144 Pages 2-32 through 2-36, social and economic conditions. It is unclear whether the data and discussion in this section includes the Navajo Reservation. Impacts to the Navajo people are discussed in chapter 3, but the significance of those impacts is difficult for the reader to determine if the overall contribution by the reservation to the planning area (i.e., data specific to the reservation) is unknown.

L139: The inference you suggest was not intended. The wording of Table 1-12 has been revised. No reference to wildlife appears on page 1-12. It is assumed you meant to refer to Table 1-12.

L140: The Navajo Occupancy Resolution Program is but a segment of resolving the land ownership adjustment issue. Social concern may be the best way to generally describe conditions where detailed analysis and assessment of impacts is quite subjective. Narrative has been added to Alternatives B and C similar to Alternative D which describes the potential impacts of land adjustments to private non-Indian ownership. Refer to the last sentence, first paragraph in Alternative D, Social and Economic section of the Environmental Consequences, Chapter 3 of the draft.

L141: It is not the intent of the RMP to provide a complete record on any topic. Refer to Chapter 2, Affected Environment Introduction section in the draft which refers the reader to more detailed information.

L142: Refer to response L141.

L143: Detailed descriptions of areas which would be affected by the plan are presented in the Pump/Middle Mesa, Rosa, and Largo HMPs. The major long term effect would be improved management efficiency due to a consolidation of land ownership in the acquisition zone.

As stated on page 2:18 there is no estimate of wash habitat. An attempt at a rough estimate at this time would only mislead the reader since potential wildlife values cannot be estimated without field verification of habitat composition and quality. Likewise an estimate of total miles of cliff habitat has not been made. This estimate would also be misleading since it would not take into account the suitability of individual cliffs as nest sites. In general, a continuing inventory began in 1981 has found relatively few cliff nest sites.

A discussion of springs has been added to the wildlife section of Chapter 2. There is no evidence that any of the alternatives would have a significant effect on fish communities when compared with present conditions.

L144: Statements that the RMP applies only to public land appear on pages S-1, i-1, and 3-1. See also response L56.

L145 Page 3-11, air quality. The EIS should include some discussion of the visual range impairment that commonly results from resource development. The National Park Service has visibility data for the Four Corners area that could be utilized. Also, the EIS should identify the collection and monitoring activities that you feel "may be needed to mitigate effects of management actions related to air resources" in Class II areas (see also pages 3-26, 3-40, and 3-54).

L146 Page 3-11, air quality - summary. Please indicate the degree of significance associated with the "no overwhelming impact to air quality" conclusion for this section.

L147 Page 3-12, wildlife habitat.
(a) Please expand the analysis of impacts from disposal, here and throughout the remainder of the EIS, to recognize the importance of all wildlife communities, including the non-game communities. The current discussion concludes that since no significant big-game populations utilize the area, disposal would be insignificant to the wildlife program. What about the significance of impacts to the wildlife communities? Does your wildlife program only concern itself with big-game species?

L148 (b) The analysis of impacts to wildlife habitat from coal development should be expanded, here and throughout the remainder of the EIS, to explain that long-term impacts "should" be mitigated by proper activity planning, but that successful habitat restoration, especially woodland habitat, has yet to be demonstrated in this area.

L149 (c) The EIS statement that "raptors nesting in or near mining activities will move their nest sites away from the area of immediate disturbance" is not entirely accurate. The statement infers that raptors readily move their nests, when in fact moves are very disruptive to the individuals involved. When successful, moves are the result of extensive nest-by-nest mitigation. Under the Migratory Bird Treaty Act, BLM could use lease stipulations to protect as many existing nesting sites as possible and reduce the need to impact active nests.

L150 Page 3-18, social and economic conditions. Please expand the discussion on impacts to county revenue, here and on page 3-46, to explain whether the figures given include the effect on Navajo Tribal revenues. Also, the discussion on impacts to local firewood users should be expanded to indicate how heavily the resource is being used and how critical the current level of firewood availability is to the lifestyle of rural firewood users.

L151 Page 3-32, social and economic conditions. The EIS should provide an approximate number of animal unit months (AUM's) anticipated to be lost to vegetative uses to support the conclusions given here. Is it the equal to the 25,822-AUM reduction discussed on page 3-21? How many of these AUM's would be lost from Navajo allotments? What proportion of the total does this represent? What are the actual "social and economic impacts for livestock operators" being referenced? You identify them as "rather severe short-term social concerns" on page 1-48 (table 1-12, social and economic conditions).

L145: Only negligible impacts to air quality as identified are anticipated due to proposed actions of the RMP. Future activities as a result of coal tracts brought forward for leasing consideration, for instance, may necessitate further air quality assessment. Data from monitoring stations of the National Park Service and private industry would be heavily relied on.

L146: The word "significant" has replaced the word "overwhelming."

L147: As stated on page 2-17 of the draft inventory data on non-game species are not available for much of the resource area. Speculation on impacts without such data would be misleading. In all likelihood land use in the disposal area will not change from present conditions. To imply otherwise would ignore the field situation (see also page 3-2 paragraph 3 of the draft).

L148: Potential impacts to wildlife are discussed in the San Juan River Regional Coal EIS (see page 1-2 DRMP). The word "would" on page 3-12 of the draft has been changed to "should." Analysis of habitat restoration is best addressed during the activity planning stage although it should be noted that only four of the tracts brought forward contain any woodland habitat.

L149: Raptors do in fact move their nests when disturbed by mining activity, other human activities, or natural changes in field conditions. This statement is based on actual observations of raptors in and near active mines in the planning area and elsewhere. Individual nesting pairs have different responses to disturbance. Speculation on behavioral responses of hypothetical nesting pairs that are not presently on the tracts is beyond the scope of this RMP. A statement on lease stipulations has been added to page 3-12, DRMP.

L150: The figures used here do not relate to nor have an effect on tribal revenues.

Detailed information on fuelwood harvest is presented on page 3-9 of the draft. Present harvest rates (if accurately reflected by permit sales) are at the maximum level for sustainable yield. BLM permit sales do not distinguish between rural and urban users.

L151: Of the 25,822 AUM reduction, 21,159 AUMs are on Indian allotments. This represents 82 percent of the proposed reduction. The social impacts would be the trauma of going through another stock reduction. The economic impacts would be the loss of an estimated \$23 to \$28 per head (of sheep) income. This loss may be significant to individual livestock operators if they are heavily dependent on livestock income. However for the 4 counties involved in this Resource Area, figures reported by Bureau of Economic Analysis for 1984 show farm income equaling less than one percent of the total personal income. While herd size is not available for many operators the overall number of operators and number of AUMs indicate small herds for most operators.

L152 Page 3-55, wildlife habitat. The impacts of disposal on wildlife populations should be expanded. The EIS specifies that "long-term effects would depend on management practices employed by the agency or individual acquiring the land". But it fails to recognize the potential for the majority of these lands to, in all likelihood, be converted to single use grazingland; a potential that would have significant impacts to the wildlife populations, both non-game and big game, utilizing these lands.

L153 Page 0-20, criterion no. 19. The decision to defer the investigation of whether or not any alluvial valley floors (AVF's) exist within the planning area should be reconsidered. A limited investigation, based on existing data, would be sufficient to identify any potential problem areas. The 4,978 acres of floodplains discussed in criterion no. 16 (page 0-19) would be an excellent place to start. The impacts to AVF's could then be addressed in the EIS analysis and only require refinement during future activity planning.

L152: The lands in the exchange zone have, for the most part, been used only for grazing and some mineral development for years. For the BLM to imply that major land use changes would occur on these lands or that there would be "significant impacts to wildlife populations" would be extremely speculative and would ignore the actual field situation.

L153: Even though the floodplains discussed in Criterion 16 would highlight areas which may contain alluvial valley floors, further detailed geologic, hydrologic, land use, soils, and vegetative data and analysis studies would be necessary to make final alluvial valley floor determinations. Since the data and analysis are not available currently, the determinations have been deferred to a later date. At present, as there are no streams in the coal tracts, it does not appear that any alluvial valley floors, as defined by 30 CFR 710.5, are present.



Natural Resources
Defense Council

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San Francisco, CA 94105
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28

June 1, 1987

Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

RE: Draft Farmington RMP & EIS

Dear Mr. Fellows:

These comments on the draft Farmington RMP and EIS are submitted on behalf of the Natural Resources Defense Council (NRDC). NRDC is a non-profit, environmental organization with over 75,000 members and contributors nationwide. Our members use and enjoy the Farmington Resource Area and support measures to protect and improve the diverse natural resource values in the area.

L154 In general, we support the proposal to reduce livestock grazing in the area. It is apparent from the RMP and EIS that significant resource damage has occurred and is occurring as a result of excessive and improper livestock grazing. The proposed short-term and long-term reductions in AUMs are clearly necessary and amply supported by the EIS. Although we recognize that final adjustments in grazing levels will not be adopted until monitoring data are gathered, we urge the agency to require immediate reductions where sufficient data exist to support such a decision, as authorized by regulation. See 43 C.F.R. §§ 4110.3-2, 4110.3-3 (1986).

L155 We understand that widespread trespass problems have led the agency to propose the disposal and exchange of an extensive portion of the area. However, we are concerned that the agency will sell or transfer lands that have high resource values. In our view, one of the criteria that should be considered by the agency is whether an area provides important wildlife habitat, riparian conditions, cultural values, or other significant attributes. If so, the area should be retained in public ownership or exchanged only for lands having equivalent resource values.

L154: Comment noted.

L155: Trespass was not the major reason for establishment of the exchange zone. Rather, it was proposed to resolve a variety of management problems caused by the scattered nature of the public land in the southern portion of the FRA. Initial inventory has located no riparian areas or other important wildlife habitats except in the Lindrih area. Analysis of specific exchange proposals will be conducted to ensure that all resource values are adequately considered.

L156

We also support the BLM's proposal to designate a number of "special management areas." However, we urge the agency to increase its use of the "area of critical environmental concern" (ACEC) designation, since this designation is recognized by statute as meriting priority in the planning process. In addition, we are concerned that the justification for the agency's decision not to recommend ACEC status for certain areas was not included in the plan or EIS. The plan and EIS should centralize all of the agency's basic analysis and decisions. It is not reasonable to expect the public to visit Farmington in order to review the agency's ACEC recommendations. This information should be included in the revised plan and EIS and circulated for additional public comment.

Thank you for considering our comments.

Sincerely,



David B. Edelson
Staff Attorney

L156: There was an extensive evaluation of special areas for ACEC consideration. The effort resulted in proposed designation of 19 new ACECs. Decisions on areas considered but not proposed are heavily documented in a series of four worksheets for each area. The documentation is too lengthy for inclusion in the RMP but is located in the unpublished Management Situation Analysis located in Bureau offices in Santa Fe, Albuquerque, and Farmington.

Ward & Blue

29

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Roy Ward,

Martha Blue

Tuba City, Navajo Indian Reservation, AZ

June 2, 1987

Ron Fellows, Area Manager
RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4184
Farmington, New Mexico 87499-4184

Re: Draft Farmington RMP and EIS

Dear Mr. Fellows:

These written comments are on the Draft Farmington RMP and EIS as I was unable to attend the public hearings.

L157 [The proposed management direction for these lands should protect natural and cultural resource values. Specifically, no Coal Belt should be brought forward for further consideration for leasing, nor should there be development of the Coal Belt SMA or the ROW windows.

L158 [To the extent that the 138 grazing allotments in the San Juan Grazing EIS as well as the 184 allotments in the Chaco Land Range Management issue area are held by allottees who are big ranching corporations or partnerships managed by persons who have no interest in same, then the grazing on these allotments should be eliminated. This is not to include any allottees who may be single family operations or traditional Native American extended family livestock operations. Except to the extent that resources involving habitat for threatened or endangered species, wet lands and important cultural resources, Navajo occupied lands should be subject to land transfers either through sale or exchange to the Navajos to avoid the present checker board land patterns in FRA.

L159 [Forestry impact should be limited to resource conservation rather than increasing fuel harvest each year. In regards to hydrology, again I would prefer the resource conservation alternative, as well as the same alternative for air quality. Areas that exhibit high scenic quality and high visual sensitivity should be protected and should have no decreased scenic quality.

L157: The proposed multiple-use management direction for public lands protects a wide variety of natural and cultural resource values as well as provides for the orderly development of resources. Refer to Appendix B of the draft RMP.

L158: According to 43 CFR 4110.1(c), if a corporation or partnership formed for the purposes of managing a ranching operation on public lands is authorized to conduct business in the state in which the grazing use is sought, it is considered a valid allottee. Elimination of livestock grazing on these allotments on the basis of corporate or partnership management would be illegal.

L159: Fuelwood harvest will be limited to that which can be maintained on a sustained yield basis.

Ron Fellows, Area Manager
June 2, 1987
Page 2

L160 [And in terms of wild life I would prefer the resource conservation approach.] In regards to wilderness, none of the alternatives offered provide positive short and long term benefits to wilderness areas unless adjacent leasing and development of surface coal is entirely eliminated near wilderness lands.

L161 [As far as cultural resources are concerned any significant prehistoric and historic occupations should be represented in a special management spectrum with controlled access enforced along with the prohibition of off-the-road vehicular travel. Significant sites should be acquired such as the Middle Mesa and other sites.] Again the resource conservation alternative for paleontology is preferred.] Outdoor recreation and public use should not include motorized recreation except to limited existing roads. The adverse impact which would be caused as a result of resolving coal leasing suitability assessment issue should be eliminated

L165 [and acquisition of lands around wilderness areas, the Falso Forest and the WSA should be a priority.

L167 [In regards to social an economic conditions the land ownership adjustments should favor the Navajo people rather than corporate or big business.

L168 [Again the management direction for these lands should enhance and protect natural and cultural resource values on both a long term and short term basis. The management direction should recognize the historical and cultural importance of this Navajo Country in its management decisions.

Sincerely,

Martha Blue
Martha Blue

MB/tmm

L160: Comment noted.

L161: Refer to Appendix O in the draft, Multiple Use Screen #4, which eliminates leasing adjacent to wilderness. The environmental consequences of this proposed action provide both short and long term benefits.

L162: Appendix B in the draft RMP recognized such a spectrum of SMAs and the management prescriptions proposed restrict vehicles from off-road travel.

L163: Comment noted.

L164: Comment noted.

L165: There would be no impacts due to considering coal tracts for leasing. There are potential impacts assessed in this document should tracts be leased and then mined.

L166: Comment noted. Refer to Acquisition Zone in Alternative B of the draft. A portion of this zone is brought forward into the Proposed RMP to consolidate ownership adjacent to wilderness.

L167: See the response to comment L158.

L168: Comment noted. Refer to Appendix B in the draft.

June 2, 1987

Doug Burger, RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Reference: Draft Farmington Resource Management Plan
and Environmental Impact Statement

Dear Mr. Burger:

El Paso Natural Gas Company (El Paso) operates one of the country's largest natural gas transportation systems, located in the southwestern United States. We rely on the San Juan Basin as a major source of natural gas for that system and maintain an extensive network of gathering pipelines, treating plants, interstate transmission pipelines and compressor stations throughout the basin.

Many of El Paso's facilities in the San Juan Basin are located on Bureau of Land Management (BLM) land within the Farmington Resource Area. Thus, we have a vital interest in BLM's land and resource management planning for the area.

El Paso has reviewed the Draft Farmington Resource Management Plan and Environmental Impact Statement (RMP/EIS) and offers the following comments:

- L169
1. We commend BLM for the Preferred Alternative plan presented in the Draft RMP/EIS. From El Paso's perspective, it is a balanced, workable plan, one that can protect important environmental values and sensitive resources without unduly restricting El Paso's operations in the San Juan Basin.
 2. Several of the existing or proposed Special Management Areas (SMAs), as identified in the Preferred Alternative, have existing El Paso facilities within them. These SMAs include:
 - o the Simon Canyon Recreation Area,
 - o the Angel Peak Recreation Area,
 - o the Jones Canyon SMA,
 - o the Laguna Seca Mesa SMA,
 - o the Aztec Gila Area of Critical Environmental Concern, and
 - o the Kutz Canyon Paleontological Area.
- L170

L169: Comment noted.

L170: Clarifying language has been added to the introduction of Appendix 1 to indicate that SMA designation will not affect maintenance and operation of existing facilities.

Doug Burger, RMP Team Leader
Bureau of Land Management
June 2, 1987
Page two

For these and other SMAs that have existing oil-and-gas-related facilities within them, El Paso believes the need for continued operation and maintenance of those facilities should be specifically recognized in the proposed Resource Management Plan and Final EIS.

- L171 3. Finally, for many of the SMAs, the impact of SMA designation on oil and gas activities will not be fully known until the detailed activity plans applying to these areas are developed. El Paso requests that it be afforded the opportunity to participate in the development of those activity plans.

L171: Comment noted.

El Paso appreciates the opportunity to comment on the Draft Farmington RMP/EIS.

Yours truly,



John A. Sproul, Jr.
Senior Environmental Scientist
Environmental & Safety Affairs Department

mts



Sierra Club

Santa Fe Group - Rio Grande Chapter

440 Cerrillos Rd., Suite G, Santa Fe, NM 87501 (505) 983-2703

June 2, 1987

Mr. Doug Burger, RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

Dear Mr. Burger:

We welcome this opportunity to comment on the draft Farmington R&F. Stewardship of real estate of this magnitude is a major responsibility and presents numerous challenges. We understand that compromises are sometimes necessary, but we strongly support resource conservation whenever it can be practically implemented.

- L172 The Preferred Alternative seems to be a reasonable, conservative approach to most management problems. We are impressed with the number of SMA's that have been designated. It is disturbing, however, that many of these SMA's have "limited" ORV designation. The definition of ORV limited in the glossary is vague. We feel that ORV use generally should be limited to existing roads except in those areas specifically designated for ORV use. The management goals for some SMA's are to protect the habitat for threatened or endangered plants and animals (Examples: Aztec Gilia Habitat, Reese Canyon RNA and The Hogback ACEC). It would seem particularly appropriate in these areas to restrict ORV use to existing roads. The "limited" designation does not seem to provide this restriction.
- L173

- L174 Ah-shi-shi-pah WSA and Fossil Forest RNA both have attributes which deserve special protection as public lands. Unfortunately, they also have valuable coal deposits. We realize one or both may be pawns in the Hopi-Navajo negotiations, but we strongly object to making them otherwise available for exchange or disposal.

Sincerely,

Myles Brown

Myles Brown, for
Santa Fe Group,
Sierra Club

L172: Comment noted.

L173: The management prescriptions considering ORV designations have been revised to further define the limitation on vehicle use.

L174: Refer to responses L120 and L131.

(Typed for reproduction purposes)

Burt Donaldson
407 Alisa Drive, SE
Albuquerque, NM 87108

RMP Team Leader
Bureau of Land Management
Farmington Resources Area
Caller Service 4104
Farmington, NM 87499-4104

Dear Sir:

I have reviewed the draft Resources Management Plan for the Farmington Resources Area and offer my comments as to anticipated impact on my personal situation.

I operate a small cattle ranch in the Lindrith area. The surface ownership of the rangeland is small multiple tracts of federal, state and private. The topography includes badlands and ridges which sometimes constitute physical barriers. Vegetation consists of sage, pinon-juniper and improved pasture.

As I understand the RMP draft, BLM seeks to dispose of small federal tracts, such as these which I currently lease for grazing. The reasons BLM advances to support disposal are easily understood, i.e. consolidation of larger tracts for more efficient management. However, my interaction with BLM has been minimal; limited to annual billing and discussion and implementation of range improvement practices. Hence, I do not see any substantial demand on BLM manpower in my case. Additionally, transfer of ownership of the federal lands on which I am a permittee to any non-government entity would seriously impair my ability to continue operation as a ranch because of the extreme intermix of surface ownership and attendant access limitations.

L175

In consideration of the above, I would strongly urge no changes in current management practice, i.e. I recommend adoption of Alternative A if my interpretation of the RMP is correct. BLM could well seek other remedies to improve management of federal lands than those listed in the RMP. If, for example, in particular situations BLM is called upon for extensive interaction with a grazing permittee, fees should be adjusted accordingly. Emphasis could also be placed on rewarding ranchers who improve range conditions by appropriate practices or grazing could be justifiably raised to the 4-5 dollar/AUM area (the target of \$6 once proposed by BLM cannot be justified where water, fencing, care, etc. are not provided.)

In closing, I hope that I have correctly interpreted the RMP draft so that my comments are relevant. I suspect that many ranchers in the Lindrith area share my situation and will likewise be adversely impacted by removal of BLM grazing privileges.

Respectfully yours,

Burt Donaldson
6/3/87

L175: Your preference of alternative is noted and your interpretation of the RMP is correct. The Lindrith area does fall within the exchange zone which means that public lands are targeted for exchange out of public ownership. Exchanges will be considered on a case-by-case basis. The effects of land ownership adjustments on grazing privileges are identified in the Draft, Chapter 3 Environmental Consequences, Rangeland section.



United States Department of the Interior

NATIONAL PARK SERVICE

SOUTHWEST REGION

P.O. BOX 728

SANTA FE, NEW MEXICO 87504-0728



33

IN REPLY REFER TO:

L7619(SWR-PE)

JUN 3 1987

Memorandum

To: Area Manager, Farmington Resource Area, Bureau of Land Management,
Farmington, New Mexico

From: Associate Regional Director, Planning and Cultural Resources,
Southwest Region

Subject: Review of Bureau of Land Management (BLM) Draft Farmington Resource
Management Plan/Environmental Impact Statement, San Juan,
McKinley, Rio Arriba and Sandoval Counties, New Mexico (DES-87/5)

We have reviewed the subject document and have the following comments.

Chaco Culture National Historical Park (Chaco) was listed on the National Register of Historic Places in October 1966, and has been nominated as a World Heritage Site for its outstanding cultural resources. The BLM and the National Park Service (NPS) signed a memorandum of understanding in January 1987, which requires the BLM not to lease Federal lands where coal development could adversely impact the values and purposes of NPS units. The multiple-use screening analysis suggesting no surface mines within 15 miles of a class I clean air area, or within 3 miles of Chaco, may not be sufficient to avoid adverse impacts. We are concerned that leasing of coal tracts 3 miles from Chaco and its significant outliers may harm the values and purposes for which Chaco was established.

The Resource Management Plan-Environmental Impact Statement (RMP-EIS) does not contain a cumulative air quality analysis. There are two major coal-fired power plants and four existing surface mines in the Farmington resource planning area already producing more than 20 million tons of coal per year. The RMP-EIS calls for leasing of from 14 to 39 new coal tracts in the area. There is only a passing mention of the proposed Dinah coal-fired power plant, which would be located approximately 15 miles north of Chaco, between the Bisti and De-na-zin wildernesses and the Ash-shi-sle-pah wilderness study area, and which presumably would use coal from the private Nageezi surface coal mine and the nearby Federal leases. All of these sources generate particulate matter, including fugitive dust, from various mining and processing activities. The power plants generate sulfur and nitrogen dioxide as well.

L176: Impacts due to specific mining operations or a collection of specific mining operations depend upon the plan of development for the specific mine tracts. These plans are too detailed (and in many areas are unknown) for the RMP to consider. The RMP only identifies areas acceptable for further consideration for coal development. The impact assessment you request will occur during activity planning at a later time when the actual leasing action occurs.

L176

Chaco is a class II clean air area. Increments for class II areas have been established in the Clean Air Act, and cannot be exceeded. No analysis has been performed to indicate the cumulative ambient pollutant concentrations which may be generated by the leasing of the new tracts, the possible construction and operation of the Dinah power plant, or the contributions of the existing mines and power plants. In the interest of anticipating, avoiding and resolving potential resource conflicts as early as possible in the planning process (as envisioned by the BLM-NPS memorandum of understanding) the final RMP-EIS should include a more detailed analysis of potential impacts on the resources and values of Chaco, including a cumulative air quality impact analysis discussing potential effects on air quality related values. The final RMP-EIS should also contain a discussion of air pollution control technology which would be applied to each new surface mine operation and the proposed power plant.

In addition to our concerns regarding air quality impacts, the Office of Surface Mining Reclamation and Enforcement (OSM) recently (May 19, 1987) published revisions to its surface coal mine unsuitability regulations defining fragile and historic lands. Chaco and its outliers would seem to fit either or both definitions. The final RMP-EIS should include an assessment of whether the lease tracts proposed for development should be deleted based on the revised definitions.

Richard C. Lichen

L177: The regulation you cite, 30 CFR 762, provides the broad definition under which individual unsuitability criteria are developed. The more detailed regulations which define individual criteria and the BLM's responsibilities under them are actually in 43 CFR 3461. While the changes in 30 CFR 762 may eventually result in an alteration of the language in some of the detailed criteria or a change in the number of a criterion, it does not appear the actual area protected under the criteria will change.

DNA-PEOPLE'S LEGAL SERVICES, INC.

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TELEPHONE (505) 871-4181

NORMAN H. RATION
EXECUTIVE DIRECTOR

JOHN SLEDD
DIRECTOR OF LITIGATION

June 3, 1987

RMP Team Leader
Bureau of Land Management
FARMINGTON RESOURCE AREA
Caller Service 4104
Farmington, New Mexico 87499-4104

RE: Draft Farmington Resource Area Resource Management

Dear Mr. Burger:

DNA-People's Legal Services, Inc., represents a number of Navajo individuals living in the Farmington Resource Area ("FRA") including persons who graze, reside on, or otherwise use public lands, and owners of surface above minerals claimed by BLM. These comments on the Draft Farmington Resource Area Resource Management Plan ("RMP") are submitted at the request and on behalf of these individuals.

GENERAL COMMENTS.

L178

One objective of land use planning is avoidance or mitigation of resource conflict. The Farmington RMP centers its attention on the conflict between resource protection (Alternative B) and resource production (Alternative C). This is not, in fact, the central conflict in the FRA. That conflict involves not production or preservation, but control; in particular, control by Navajos or non-Navajos. This is the same fundamental issue which has dominated the San Juan Basin for four hundred years or more. Because the RMP focuses on the wrong question, it presents and chooses between alternatives, none of which directly address or can adequately resolve the land use conflicts which plague the Area. Those conflicts will be resolved only when a Navajo alternative is formulated, which squarely raises the correct issues.

LAND OWNERSHIP ISSUE.

The RMP comes closest to a proper focus in discussing the land ownership issue. Unfortunately, the discussion tends to be either inappropriate or inaccurate, and fails to address essential issues and alternatives.

L178: The RMP is an issue-driven document geared towards resolving conflicts through land-use planning on lands under BLM administration. The issue of land jurisdiction or control might have received more attention and different treatment if your input was received in 1985 when the planning issues were identified and discussed at the public involvement phase.

We would be very interested in a Navajo alternative that we could discuss and negotiate. If existing laws and regulations need to be changed to support a Navajo alternative, we may be in a position to support such changes.

L179 The Draft states that the State of New Mexico shall have first preference in obtaining lands which BLM disposes of. P. 1-9, 1-38. If true, this is obviously inappropriate, as it proposes to give the State—a party traditionally at odds with the Navajo people—title to land which historically has been and currently is utilized almost exclusively by Navajos, for basic subsistence and residence. Fortunately, the preference may be stated incorrectly. BLM officials have informed us that state preference applies only in the retention zone. If so, the Plan should say as much. More importantly, the Plan should confirm these officials' further assertion, that preference for acquisition of BLM land in the exchange zone will be given to the Navajo Nation and Navajo individuals. Such a preference reflects the long history of Navajo use. It is practical, because non-Navajos are unlikely to desire lands which BLM is abandoning because of conflicts with Navajo users and neighbors. Finally, such a preference comports with the Federal Land Policy and Management Act ("FLPMA") which recognizes a preference for disposal to current users, owners of surrounding lands, and others with "equities" in the area. 43 U.S.C. §1713.

L180 The RMP recognizes that traditional BLM policies on land retention and disposal do not work well in the southern part of the Resource Area. P. 1-7. The Bureau then proceeds to outline a land disposal plan which rests on these same ineffective policies. The RMP discusses only disposal or exchange under FLRA, with its restrictive requirements of equal value exchanges and fair market value sales, and its preferences for competitive sales and federal mineral reservations. In essence, the Plan proposes that Navajos now pay BLM for land which was forcibly taken from them by the federal government; that they pay for land within executive order reservations, which was returned illegally to the public domain; and that they pay for mineral interests—if they can obtain the minerals at all—which were illegally reserved to the United States during the allotment process. From the Navajo point of view, this is absurd, and insulting. It is also impractical. Neither Navajo individuals nor the Navajo Tribe can likely afford to purchase of hundreds of thousands of acres of land at market price. Nor are large exchanges feasible. Such exchanges do not accomplish the objective of expanding Navajo ownership of Navajo land, and neither the Tribe nor individuals have large holdings of unoccupied land, within the retention zone, to exchange for lands earmarked for disposal.

L181 The RMP could avoid these problems by proposing an obvious alternative—legislation. Legislation to consolidate Navajo ownership has been discussed for decades. Extensive land withdrawals have been made to preserve the legislative option—withdrawals which BLM will soon review. RMP pp. 1-10, A-5. If BLM is really to meet the mandate of the National Environmental Policy Act ("NEPA"), and examine alternatives "to the fullest extent practicable," 42 U.S.C. §4332(c)(1)(i), then it must address the option of combining the land ownership proposals in the RMP with the withdrawal review, and presenting a unified package to Congress dealing with the issue of Navajo tenure in the San Juan Basin.

L179: Our land exchange emphasis at this time is with the State Land Office. If lands go to the state, it does not mean that the lands might not eventually be transferred to the Tribe. In reality, the state has indicated that they are not particularly interested in acquiring lands in the Exchange Zone.

Because of existing users, the Navajos would have a greater interest in acquiring these lands than anyone else.

L180: It is because of ineffective policies that the Bureau proposes a new direction to resolve issues that are obviously not working (i.e. the exchange zone in Alternative D). The arguments presented have been debated for years and are not as black and white as offered. We feel that land exchanges, disposals and consolidations can be successfully achieved with the Navajos. Examples are the Navajo Indian Irrigation Project and the Navajo Exchange (NM-32341) that is currently in the third patent phase. The means for Navajo land consolidation has been paved, the ways of consolidation will be worked out in sales, exchange proposals or new legislation. Refer to your own comment L185 on the benefits of the exchange zone concept.

L181: Legislation could be used as a tool for resolving issues within the context of the alternatives. However, it is not within the scope of an RMP to propose legislation. The Navajos have to live by the same laws as everyone else. In the past, they have been unsuccessful in changing the laws to benefit the Tribe to the extent desired. If new legislation is needed, it might be more successful with BLM support.

BLM must also fully explore its options under FLPMA. The current draft ignores authority for disposition of mineral rights, and for non-competitive sales. FLPMA permits mineral disposal when federal ownership is interfering with non-mineral development which is a more beneficial use. 43 U.S.C. §1719(b)(1)(2). Certainly, where Navajo families are threatened with relocation due to surface mining, and where practicing a tradition which is a lesson not only for their own people but for all Americans, these criteria are met. See also §2091.5, 2091.6-3 (1986); *Cramer v. United States*, 67 L.Ed. 622 (1923); 43 C.F.R. Despite the restrictive interpretation contained in recent regulations, 43 C.F.R. §2720-0-6, 51 Fed. Reg. 9657, §209 of FLPMA would support significant mineral disposals.

A similar opportunity to address the central issue of Navajo control is presented by §203 of FLPMA, 43 U.S.C. §1713(f). This section allows direct, non-competitive sales, in order to recognize equities of current users, adjoining land owners, and individuals engaged in inadvertent occupancy of public lands. 43 C.F.R. §2710.0-6. While application of section 203(f) will not avoid problems of cost, it would prevent further non-Navajo encroachments. BLM has recently applied this provision in favor of non-Indian occupants in New Mexico. 53 Fed. Reg. 6396 (March 3, 1987). As trustee, it should do the same for Navajo families which have occupied public land for generations without recognizing the unauthorized nature of such use. At a minimum, the RMP should mention this authority, as was done in the Rio Puerco RMP.

Just as it relegated the issue of Indian withdrawals to peripheral status under the rubric of "continuing management guidance, the Bureau has failed to describe its Navajo Occupancy Resolution Program. This program is clearly within the ambit of the land ownership issue. The Program raises again the spectre of Navajo relocation, see RMP p. 1-10 ("authorized or eliminate occupancies"); p. 9-56 ("active pursuit of unauthorized occupancies"). As evidenced by testimony at the Crownpoint RMP hearing on May 5, the issues of occupants and relocation are paramount to the Navajo public. The Bureau's reaction to this testimony was to deny that there are any unauthorized occupants, *Gallup Independent*, May 6, 1987, p. 1, which is not true (unless BLM has changed its views of occupants' legal status); to state that there has not been any relocation of such occupants, *id.*, which may or may not be literally true, see, *Margaret Chicharello, et al.*, 9 BIA 124 (1973) (BLM may sell Navajo occupied public land); accord, *Magnel E. Drabek*, 42 BIA 219 (1979); and to further state that there will be no relocation. *Id.* If the latter assertion is true, it represents a sea-change in BLM policy, compare *San Juan Basin Regional Coal Final EIS*, p. 4-11, which surely merits more than a passing paragraph in the Plan. Rather than avoiding the issue in this way, the Bureau should briefly describe in the RMP the nature of the Occupancy Program, the number of people affected, the legal rights of the occupants, and alternative Program procedures and criteria for confining those rights in title documents.

L182: Any exchanges will be analyzed on a case-by-case basis. Nothing in the plan precludes mineral as well as surface exchanges. The BLM would welcome any exchange proposals which involve both surface and mineral estates within the guidelines of sections 203, 206, and 209 of FLPMA.

L183: Under 43 CFR 2711.3-3 a direct sale of public lands to resolve inadvertent unauthorized use or occupancy is allowed. It is true that this regulation has been used recently to authorize a non-Indian occupancy in the Resource Area. It is also true that this same type of action is one of the proposed solutions for eliminating Indian unauthorized use in the Navajo Occupancy Resolution Program. However this BLM initiated program has not received the approval of the BIA or the Navajo Tribe. Without the approval and support of those two entities this program does not have a very strong chance of accomplishing its main goals; authorizing or eliminating unauthorized use and development of a plan that would provide guidance for the consolidation of both public and Navajo lands.

L184: In reality, we envisioned a much more ambitious Navajo Occupancy Resolution Program in 1983. Under the direction of the previous Area Manager an aggressive program was developed in late 1983 and presented to our Washington Office in 1984. It received a favorable response but no additional funding was approved (about \$30,000). As a result, the program was left to compete with other realty projects for the limited funding available. If the BIA and Tribe provide their support at the Department level, the Bureau may be more successful in obtaining special funding in the future. Refer to page 1-10 of the Draft for a description of the Navajo Occupancy Program. This program is part of Continuing Management Guidance much like other Bureau programs in order to meet existing law and policy as well as carry forward valid decisions made in past planning efforts. This is a very important part of an RMP.

The statement in the article is obviously a misquote. The same article contradicts this with a quote that states "95% of occupancies" have been settled. The Bureau would not have a program or state in Table O-6 that 19 occupancies are present on public lands if it denied unauthorized occupancies.

L185 [My final comments on the land issue involve the delineation of disposal and retention zones. First, my clients support the use of the exchange/retention zone boundary in Alternative C. This boundary maximizes Navajo opportunities for land acquisition, and minimizes the number and extent of Navajo chapters and communities dependent on a non-Navajo land base. Second, BLM should consider either land acquisitions within the proposed Coal Belt SMA, or pre-mining exchanges within that area. BLM is proposing surface mining as the dominant use in this SMA, and since such use is inconsistent with uses made by many Navajo people, the Bureau should permit exchange of allotment surface within the SMA for BLM surface elsewhere in the exchange zone.

GRAZING.

L187 [The RMP understates impacts of grazing proposals on Navajo operators, and does too little to mitigate these impacts. The Plan projects only short-term impacts from very significant reductions in available AUMs. Pp. 3-32, 3-60. As the RMP itself recognizes, *id.*, stock reductions in the 1930's are still vividly recalled by Navajo people. Similar, long-term impacts can be expected with current reductions. These effects will be felt by far more than 185 Navajos, *cf.* RMP p. 2-5, given the typical dependence of large extended families on a single permittee. These impacts could be lessened by granting disposal preference to current users and others who will commit to maintaining current uses; and by actively working with the Navajo Tribe and Navajo graziers to provide alternative locations to operators facing significant reductions in permitted use. In addition, where feasible, any vegetative manipulations should be located, sized and scheduled to avoid a total loss of any individual's grazing privileges during the two year recovery period. Such a provision should be included in the Standard Operating Procedures in Appendix M.

L188 [Certain information needed to evaluate potential grazing impacts is not discussed in the RMP. In particular, the RMP should discuss the recent history of range improvement funding, in relation to proposals for more intensive management. See, p. 1-7. Funding shortages may well leave livestock reduction as the only option for rangeland improvement.

MINERALS.

L189 [The RMP's analysis of mineral issues suggests that BLM does not merely "encourage" mining, consistent with other uses, see p. 1-2, but seeks to establish mineral development as the dominant use of public lands. This drive for dominance is most apparent in designation of the Coal Belt SMA, an area in which other uses will be officially subordinated to mining. Designation of an area in which the usual management policies--for example those dealing with occupancies and exchanges, compare pp. 1-10 and 1-36 with B-56--will not apply, in order to promote

L185: Comment noted.

L186: The BLM is not proposing mining. The RMP serves only to determine which areas may be suitable for coal leasing. Exchange of allotment surface within the SMA for BLM surface elsewhere could be considered on a case-by-case basis.

L187: See the response to comment L91.

L188: A discussion of past funding would have little relation to resolving this issue on setting the correct levels of vegetative use. Impacts caused by grazing are evaluated and discussed in the Environmental Consequences Chapter.

L189: See response to comment L71. The intent of designating SMAs is to reduce user and resource conflicts and make a land allocation that may be single use or resource-oriented for a particular locale, however it is fully within the multiple use mandate in the Resource Area as a whole.

a single mineral use, strays far from the spirit of multiple-use as outlined in FLPMA. 43 U.S.C. §§1702, 1712. It is significant that most, if not all, the FLPMA provisions dealing with special management or dominant use areas seek to protect natural resource values, rather than resource production. E.g., 42 U.S.C. §1702(a)(defining "areas of critical environmental concern"); §1712(c)(3)(plans shall give priority to designation of ACEC's). Designation of this mineral SMA recalls the concept of western coalfields as "national sacrifice areas," first described in a National Academy of Sciences report over ten years ago. Current management authority is adequate to prevent undue interference with mining, without resort to this controversial designation.

L190 The dominance of mining is reflected less obviously, but pervasively, in the downplaying of impacts on other resources. The plan states that under Alternative B, leasing of 14 competitive tracts would not "measurably" affect air quality. P. 3-26. Production from about half that number of current mines, and associated power plants, see p. 2-3, already leads to emissions in excess of standards. P. 3-11. Similarly, the draft downplays conflict with the Continental Divide Scenic Trail, suggesting that no feasible treadway exists on Eln Lunde in the FWA, p. 2-30, although the Trail Plan identifies three possibilities, p. 0-5. Incidentally, I cannot find in the Rio Puerco RMP the conclusion attributed to that plan on p. 2-30 of the Farmington Plan.

L192 The discussion of coal development history and application of coal development screens are also skewed in favor of development, and reflect the problems arising from past failure to address coal leasing as part of comprehensive land use planning. The plan states that competitive tracts have been re-evaluated with an eye to transportation and economic feasibility. P.N-3. In fact, it does not appear from Table 0-3 that any tracts were dropped for lack of transportation facilities, although numerous studies concur that lack of rail access makes much San Juan Basin Coal uneconomic. New economic analysis was applied with regard to underground mines, but in a manner far different from that implied in the Plan. In particular, the maximum stripable depth has been increased to 350 feet, from the 250 foot limit consistently used in the past. See San Juan Basin Cumulative Overview Draft p. 1-3; Rio Puerco RMP Draft, p. 3-5. This change and its effects on coal development potential should be explained.

L193 The RMP relies exclusively on the San Juan Basin Regional Coal EIS for analysis of coal impacts. Unfortunately, rather than that EIS serving as an activity plan based on a prior comprehensive land use plan, the former is the case. More significantly, the Coal EIS was deficient in content as well as timing. The deficiencies are described in comments on the Second Draft Coal EIS. One of the most serious flaws was its failure to select stipulations, guidelines, and standards for leasing and mining. This failure is perpetuated in the RMP, thereby thwarting the requirements of the Federal Coal Leasing Amendments Act, which preclude leasing where the sale is not compatible with

L190: Refer to response L176.

L191: Refer to the Final Rio Puerco Resource Management Plan (1986). Pages 165 and 166 clearly identify the treadway in narrative and map form. Treadway placement is the result of extensive inter-agency efforts to administer the Continental Divide Scenic Trail including reducing the management conflicts. An SMA is added for clarification.

L192: Transportation was one of the factors used to determine coal development potential and contributed in the dropping of some of the tracts. The changes in economic feasibility estimates, stripping limits, and so forth noted between this and earlier documents can be explained in two ways. First, Fruitland coals are usually thicker and more continuous than the Mesaverde coals found in the Rio Puerco Resource Area, a fact which allows greater stripping depths at the same stripping ratios. Second, the figure used in the Cumulative Overview document assumed that leasing would occur in 1983 or 1984 and that mining might occur relatively soon afterward. This plan, by contrast, attempts to allow for hypothetical future improvements in mining technology and coal economics, so that if they occur, the resource will not have been rendered inaccessible because of a lack of foresight. The SJRCIS analyzed development of coal tracts to a maximum stripable depth of 350 feet, although the maximum stripable depth is calculated separately for each tract based on the coal resource present.

L193: 43 CFR 3400 regulations provide extensive stipulations, guidelines, etc. for leasing federal coal, 30 CFR 700 regulations contain standards and guidelines for mining coal throughout the U.S., and the Draft RMP lists an additional seventeen (17) multiple-use screens which have been applied to the coal tracts in the FWA for the purpose of determining which tracts are acceptable for further consideration for leasing.

stipulations, etc. set forth in the land use plan. 30 U.S.C. §201(a)(3)(A)(1).

L194 The flip side of reliance on past, inadequate analyses is deferral of further analysis to the future. Application of several of the unsuitability criteria is deferred to the activity or mine planning stage, pp. 6-7 to 6-20, without any explanation beyond current data inadequacy. NEPA requires some explanation of the Bureau's decision not to obtain such data now. 40 C.F.R. §1502.22; see, *NREDC v. Berkland: Environmental Defense Fund v. Froehlich*, 473 F.2d 706 (agency must state reasons for choice of action). In addition, the Bureau should be clear about when it will evaluate unsuitability. The Draft suggests data collection and analysis at either activity or mine planning. P. 6-7 (Criteria No. 2); P. 6-20 (Criteria No. 19). The value of data collected at these different stages, and its ease of application varies. It is, for example, far easier to minimize adverse impacts by avoiding leasing, or conditioning leases, than by attempting to insert new stipulations in mine plans, after leases are granted. Accordingly, the Plan should be specific as to timing of data gathering and screen application.

L195 Application of the screens is substantively, as well as procedurally, flawed. The Plan extends unsuitability protection only to authorized dwellings, p. 6-11, although the Surface Mining Control and Reclamation Act ("SMCRA"), 30 U.S.C. §1272(e)(5), is not so limited. The Plan should take into account new OSMRE unsuitability regulations, 30 CFR §761.5, 52 Fed. Reg. 4261 (February 10, 1987), which expand the definition of "cemetery" to mean any area containing burials. This rule presumably was published too recently for reference in the Draft Plan. It may have a profound effect in the FRA. The Plan fails to provide adequate protection to publicly owned properties eligible for listing on the National Register of Historic Places. If listed, such properties come under the protection of unsuitability criterion number 7. No such properties on competitive tracts are currently listed, p. 6-15, but hundreds are probably eligible. See p. 2-2 to 2-58. The Bureau describes steps which will be taken to identify such sites, but ignores its duty to nominate sites for listing E.O. 11959 (1971); see NEPA, 16 U.S.C. §470h-2(a)(2); *Barcelo v. Brown*, 478 F.Supp. 646, 692-694. In fact, the Plan states that any such nominations are "unlikely." P. 6-24.

L197 Application of the multiple-use screens is also cribbed. The RMP's definition of "wetlands" under screen number 1, p. 6-21, is far narrower than that contained in E.O. 11990 (1977). Specifically, the Plan excludes small areas and salt grass stands which meet the Executive Order definition and can, at least in other environments, provide significant wildlife habitat. Screen number four, regarding leases near wilderness areas, applies to only one tract, and the Bureau avoids that application on the apparent rationale that, since one mine is in there, a second or bigger mine will make no difference. P. 6-22. The Bureau

L194: The Draft states clearly on page O-7 and O-11 that the areas affected by Criterion No. 2 have been identified and that application of "exceptions" will be deferred to the activity planning stage (see also Table O-7, page O-14, Table O-5, page O-12, and Table O-6, page O-13). The data presently available to the BLM for Criterion No. 19 indicate that there are no areas in the coal tracts which meet the definition of alluvial valley floor as presented in 30 CFR 710.5 and 43 CFR 3400.5. However to ensure that this information is the most correct and up-to-date available, this criterion as well as all others will be reapplied site-specifically at the activity planning stage (see also response L153). The timing of a lease sale will be determined by the Regional Coal Team, of which the Navajo Tribe is an ex officio member. This timing will direct when and how much new data should be gathered.

L195: Unauthorized dwellings would presumably be in trespass on the public domain. Appropriate means may be undertaken to remove or legalize them before leasing occurs. Multiple-use screen #17 addresses single gravesites, apparently anticipating the new Office of Surface Mining Reclamation and Enforcement (OSMRE) rulemaking. If the new regulations changing the unsuitability criteria are developed prior to completion of the final RMP they will be addressed. As of this writing the criteria have not been changed. Unsuitability criteria will be reapplied during activity planning (see also response L177).

L196: A program to comply with the spirit of E.O. 11959 has, in fact, been proposed and is outlined on page 1-20. The National Register of Historic Places is not intended to contain every site determined eligible, but only those sites of outstanding local and/or national significance. However, sites may be determined eligible if they meet any of the four evaluation criteria. All eligible sites warrant the same protection from adverse effect as if they were listed on the Register.

The NHPA requires the federal agency to "take into account the effect of its undertakings." The eligibility of cultural properties identified in the area of direct and indirect effects will be determined in consultation with the SHPO. If a site is determined eligible, the impacts may be mitigated through avoidance or excavation. The mitigation may then result in a determination that mitigation is impossible. It is this type of property that should then be further evaluated for listing on the National Register.

It should be noted that at no time does the BLM-FRA act unilaterally in determining whether a site is eligible or ineligible, whether impacts can be mitigated, what mitigation is appropriate, or whether a site should or should not be listed on the National Register. All decisions are made in consultation with the SHPO and every effort is made to reach an agreement in these determinations between the BLM and the SHPO.

L197: While technically more narrow than the definition in the Executive Order in the practical application of this criterion there have been no wetlands of significance to wildlife located on the coal tracts. This evaluation is based on the professional judgement of experienced wildlife biologists familiar with the coal tracts and wildlife habitat on them and in the surrounding area.

L198: Multiple-use screens are discretionary and the Bureau has recognized that coal leasing and potential future mining immediately adjacent to wilderness would adversely impact wilderness values. An example is the Sunbelt Mine adjacent to the Bisti Wilderness. The 64 million ton Bisti No. 2 tract was eliminated from leasing consideration. The Bisti 6/8 tract was not eliminated because it would not measurably affect the wilderness due to its location.

L199 "elects" not to apply screen 12, regarding tracts dependent on PRLAs, in its preferred alternative. P. 0-23. No reason for the election is given, despite NEPA requirements. Leasing of such tracts, while PRLA issuance remains uncertain, will surely depress bonus bids.

L200 With regard to Navajo cultural use sites, the Plan proposes to screen only for sites "essential to the practice of traditional Native American religion." P. 0-24. A better position would be to apply this screen to any site used for religious purposes, with an exception for sites not "essential to a practice of Native American religion." Such a screen is more protective of Native use, which is appropriate in view of the First Amendment, see *Wilson v. Block*, 708 F. 2d 735, 742-744, and the American Indian Religious Freedom Act. Also, consultation should be had with local, not merely tribal representatives, since many Navajo religious sites are local or familial in nature. Finally this screen should be applied in a way which minimizes non-Navajo intrusion into Navajo practices and does not force explicit discussion of the dead. For example, BLM might empower a local group to determine religious sites, subject to standards, and without publication of details to BLM or others. Similar changes should be made to plans for locating and managing Native religious sites as SPA's. Such SPA's should be withdrawn from solid mineral leasing, as well as sale and location, if the designation is to be effective. See p. B-38.

CULTURAL AND PALEONTOLOGICAL RESOURCES.

L201 Flaws in the Bureau's historic site listing program are discussed above. The RMP also reveals flaws in prior site survey and impact analyses. In particular, the Plan establishes a goal of gathering sufficient data to build a predictive model. P. 1-20. Implicitly, then, BLM has recognized the inadequacy of the ESCA-Tech model relied upon in the San Juan Coal Final EIS, p. 2-34. Curiously, the RMP's summaries of cultural resource impacts make no reference to coal mining, pp. 5-9, 3-44, 3-58; although mining will cause "moderate to severe" site damage. E.g. p. 3-57. Similarly, the minimal information presented on the impact of the Plan on Navajo culture appears only in the analysis of certain alternatives. Compare pp. 3-32 and 3-60 (Alternatives B and D), with 3-18 and 3-46 (Alternatives A and C).

L202 While impact magnitude will vary, the nature of effects under each alternative is not so different as to justify this omission. Again, the impacts of commercial mining on paleontological resources are described as positive, while negative effects are attributed to vastly smaller domestic mines. P. 3-16.

L203

L204 Finally, the Bureau has misconstrued the concept of "adverse effect" on historic sites. The Plan states that "inventory, testing, and excavation" would prevent such effects. E.g., p. 3-15. NEPA regulations, however, direct a finding of adverse effect when an undertaking diminishes the integrity of a site's location, setting, feeling,

L199: The decision not to apply screen 12 was taken to prevent application to the tracts of a restriction whose sole purpose seems to be to decrease the economic viability of the tracts. Leasing of the tracts is not the immediate aim of this document. Either competitive leasing or PRLA issuance may occur in the future. When and if leasing occurs, the subject of bonus bids will be studied. Unreasonably low bids can be rejected.

L200: The management prescriptions call for withdrawal from locatable and saleable minerals, as well as no surface occupancy. These prescriptions apply to existing SMAs which are located outside the competitive coal tracts. Since solid mineral leasing outside the tracts is unlikely, adding a prescription requiring withdrawal seems unnecessary. As discussed in response L33, the screen for Native American areas has been applied and withdrawal for some areas will be considered pending further study. As also noted in response L39, consultation and interviews were completed at the local, as well as the tribal, level.

L201: See comment L49 regarding the use of the term "predictive model" and the goals of the 10% inventory.

The alternative summaries focus on the overall positive and negative aspects of each alternative. They are not meant to restate all aspects of the detailed contents in the earlier text.

Page 3-57 states that "impacts to cultural resources for competitive coal leases that are brought forward and mined would be 'low to moderate' not moderate to severe as stated.

L202: The nature of effects is described qualitatively while impact magnitude is discussed quantitatively for each alternative that is markedly effected. The nature of effects are different under each alternative which varies in terms of proposed actions. Refer to descriptions of Plan Alternatives, Chapter 1 in the Draft.

L203: Commercial operations contain stipulations to recover fossil material to mitigate the adverse effects of mining, thereby resulting in overall positive impacts. The domestic mines, even though vastly smaller, might produce vegetative effects due to unmitigated collection of fossils by individuals.

L204: Treatment of sites (i.e. withdrawal from leasing, avoidance, or testing and/or excavation) is based on the values which make the sites eligible to the National Register. Sites must be eligible under one or more of the National Register criteria. Sites identified in the coal tracts, to date, have been found eligible under criterion d only. As long as mitigation through excavation or testing gathers the data that made the site eligible, a determination of no adverse effect can generally be reached. It should be emphasized, again, that a determination of no adverse effect is not made unilaterally by the BLM, but is reached through a formal consultation process with the State Historic Preservation Officer.

Additional discussion pertinent to this comment is also contained in comment L195. For further clarification of the compliance process, please refer to various Advisory Council guidelines for the Section 106 review process and treatment of cultural resource properties.

or association, or introduces elements out of character with the site's setting. 36 C.F.R. 800.3(a) and (b). No matter how much data is preserved, surface mining will not merely diminish, but demolish the sites themselves, and the unquantifiable aesthetic and other values associated with the site in place. The Plan thus violates not only NHPA, but NEPA, which requires that such unquantified environmental values be given appropriate consideration. 42 U.S.C. §4332(b). The Plan, like the San Juan Coal EIS, subordinates a concentration of Puebloan and earlier archeological sites--a relatively scarce resource of limited distribution, in favor of the far more abundant energy resource, which can be found in every home or factory using energy-wasteful appliances, vehicles, and equipment. This, too, is contrary to the intent of FLPMA land use planning. See 43 U.S.C. §1712(c)(6).

FLPMA COMPLIANCE.

L205 In addition to problems discussed above, the Farmington RMP fails in its application of two key provisions of FLPMA. First, that Act dictates that BLM plans generally be consistent with State and local land use plans. 43 U.S.C. §1712(c)(9). This the Bureau recognizes. F.4-2. The same section of the Act, however, requires consideration of ongoing state, local, and tribal planning, not merely approved plans. The RMP does not address some approved plans, such as the Navajo Nation Impact and Resettlement Policy and Plan of 1982. Nor does the Plan describe any efforts to coordinate with on-going land consolidation planning by the Navajo Nation and the BIA. Given the importance of the relocation and land ownership issues, these omissions are critical.

L206 Second, FLPMA requires public participation in land use planning. 43 U.S.C. §§1702(d); 1712(f); Participation must be afforded "citizens", and not merely their governments. In development of the Farmington RMP, BLM has obtained substantial input from the Navajo Nation, but has made inadequate efforts to involve Navajo individuals, whose interests may vary greatly from those of the Tribe. BLM has a duty to tailor its public involvement procedures to the affected public. 43 U.S.C. §1702(d) ("procedures as may be necessary to provide public comment.") Given the predominance of individuals in the FRA who lack formal education and English literacy, and for whom travel is difficult, this duty is not met by use of letters for grazing allottee consultation, p. 4-2 to 4-3; use of limited distribution, print media such as the Federal Register to announce issuance of the Draft Plan; location of public hearings at large distances from some public land users (such as those near Gallup); and failure to interpret English hearing testimony into Navajo, except on request (as occurred at the Crowpoint hearing). BLM employs very competent Navajo resource people in the FRA, and has demonstrated earlier in the planning process an ability to utilize local print and radio media and adequately located public meetings. The Bureau should apply these effective techniques consistently, and also make more use of local, chapter-based meetings.

L205: There are no known inconsistencies with any land-use plan within the Farmington Resource Area. The narrative has been revised to reflect land consolidation efforts of the Navajo Tribe.

L206: Refer to Chapter 4, Public Involvement section.

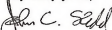
Page Nine
June 3, 1987

CONCLUSION.

L207 [Despite its shortcomings, the Draft RMP contains many positive features, and if properly implemented, will do much to resolve conflict, protect the environment, and promote sensible economic development in the Farmington Resource Area. On behalf of our clients, we thank you for the opportunity to comment. We look forward to working with the Bureau in implementing the approved Plan.

L207: Comment noted.

Very truly yours,



John C. Sledd
Attorney-at-Law

JCS/gjh
Attachments



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35

June 3, 1987

Ron Fellows
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Dear Mr. Fellows:

I have had an opportunity to review the draft Farmington Resource Management Plan and would like to make the following comments.

In general, I found the Plan very informative, with each alternative clearly outlined and discussed. Particularly useful was the qualitative synopsis of cultural resource management and compliance efforts to date. This information helps to characterize the nature and extent of cultural resources within the Resource Area.

L208 [I have noted from the general discussion of Program Directions in Chapter 1 that a 10% sample of the Resource Area is proposed for the next 20 years. At .5% per year, this should be a manageable amount. While I believe that this goal is necessary, it is important relative to your planning efforts that the objectives of this inventory be oriented to the needs of the Resource Area. How is this inventory designed? What areas will be inventoried? How will this inventory be used in future planning?

L209 [It is my opinion that this inventory should be focused primarily on the retention zone and not those areas designated as SMAs and ACECs. The retention zone comprises the majority of the Resource Area. This area, in general, represents tracts that do not have extensive documentation of cultural resources. Future planning will depend on this information. This is consistent with Section 110(e)(2) of the Historic Preservation Act.

L210 [I also believe that the SMAs and ACECs should be inventoried, but this inventory would be compatible with the management goals and potential public uses of the SMA's, consistent with Sections 106 and 110(b) of the National Historic Preservation Act, or the environmental concerns of the ACECs. These inventories should be in addition to survey proposed for the retention zone.

L211 [Another responsibility of the Resource Area is to nominate cultural properties to the National Register of Historic Places. I recommend that, instead of one nomination per year, one nomination per full-time cultural resource specialist

L208: The proposed 10% inventory of the resource will be guided by a formal research design and sampling strategy. Funding for completion of this proposal to guide the project has been requested for FY 1988. An analysis of areas to be inventoried will be addressed in the sampling strategy. The inventory results will aid in making future planning amendments and decisions regarding designations of SMAs and ACECs, ORV designations, National Register nominations, mineral leasing, etc.

L209: Paragraph one page 1-20 states that the "10% inventory will be conducted in the retention zone, SMAs, and ACECs," management established that inventory required in the management prescriptions for cultural resource SMAs and ACECs will contribute to the 10% goal. There are approximately 13,000 acres in areas calling for Class III inventory (Chaco outliers, Refugee sites, and Farmer's Arroyo). The 10% inventory goal requires coverage of approximately 120,000 acres in the retention zone. Although inclusion of the cultural SMA and ACEC inventory in the 10% goal may preclude some inventory elsewhere, we feel that this is an appropriate policy given the overall magnitude of the inventory program and its general goal of accumulating data upon which to base future management decisions. It should be noted that inventory in ORV SMAs, recreation SMAs, etc. is considered project driven and will not contribute to the 10% goal. Only areas selected as part of a random sample at the beginning of the project will be considered as contributing to the 10% inventory; however, a small percentage will be left unselected to allow for coverage in newly identified areas with high cultural values. For example, if an area similar to Chacra Mesa was identified within a sampled block or identified by a project driven inventory, it could be added to the 10% sample selection and contribute to the 10% goal. It should also be noted that the research design and sampling strategy will be reviewed in consultation with the SHPO. The concerns expressed in this comment may be addressed more specifically at that time.

L210: See response for L209.

L211: See comment response L54.

be prepared per year. These efforts will be consistent with the nature and needs of the resources in your Resource Area.

The four alternatives may result in various impacts on cultural resources. Land exchanges, "open" ORV designation, oil, gas and mineral resource development, and other economic uses of the Resource Area have the potential to adversely affect significant cultural resources. Other management alternatives, specifically, creation of archaeological SMAs, restricting ORV use and federal acquisition of cultural resources, will have a general beneficial effect on cultural resources in the Resource Area. Since this Resource Area contains a wealth of information critical to prehistoric research in the southwest, the final alternative should be sensitive to the management needs of cultural resources.

I noted three basic issues covered in the different alternatives that required comment: management of cultural resources in "open" ORV areas, management of SMAs, and the problem of vandalism in the Resource Area. These issues are not separate but are in fact closely allied.

I understand the problems of controlling access to the Resource Area and agree that designating specific ORV use areas near populated areas and limiting use of areas of archaeological sensitivity through creation of SMAs may be the best management plan. I believe that there are many other areas of archaeological sensitivity that should be identified and treated as ACECs or eventually designated as SMAs. The need for special attention can only be evaluated through further inventory, as you have recognized in your proposal to conduct a 10% inventory of the Resource Area. This, however, is an example of how this inventory could be systematically structured to further the management goals.

L212 Let me begin my discussion on SMAs by stating that I believe that setting aside archaeologically sensitive areas as SMAs is an excellent management decision and should greatly facilitate the protection of significant cultural resources of the Resource Area. I hope, as additional areas of archaeological sensitivity are identified, new SMAs will be created.

L213 A number of the proposed SMAs will alter or magnify the present use of areas, particularly ORV use areas. The Dunes ORV Play area, Head Canyon ORV Competition Area and the Glade Run Trail System may be used very extensively. A complete (Class III) inventory should be conducted in all sections of those areas that are anticipated to be used by ORVs. Other SMAs designated for recreation may also affect cultural resources through increased use. Class II inventories should be adequate to identify archaeologically sensitive areas for further management consideration.

L214 The Coal Belt and Right-of-Way Windows are other SMAs where integration of cultural resource planning would be beneficial. The Coal Belt SMA is being designed to facilitate long-term leasing. I recommend that this effort also include a Class II archaeological inventory to provide complete management information for this area. The Right-of-Way Windows represent a similar circumstance. A Class II survey should greatly facilitate your future planning efforts.

L212: As our knowledge of the cultural resources in the FRA expands, we expect that additional SMA and ACEC designations will be made.

L213: The land allocation decision was to designate and manage those areas that have been extensively used by recreation vehicles for over 30 years. Because of past use, the proposed designations are not expected to alter the environment. An extensive cultural inventory is considered an unwise expenditure of funds since use takes place on existing trails or a permanent tract in the Head Canyon and Glade Run SMAs. Cultural inventories and clearances have been completed through Special Recreation Permits for events that have taken place on the Glade Run Trail System and Head Canyon SMAs. A Class II inventory is prescribed for the Dunes SMA to be followed by a class III inventory SMAs. Inventory may be conducted within portions of the recreation areas selected by a random sample as part of the 10% inventory. This should aid in determining what effects to cultural resources may occur and what means of protection is required (i.e. signing, brochures, pairings, etc.)

L214: If interest in leasing areas other than the proposed competitive coal tracts is identified, a 10% inventory will be conducted at that time. Given the low interest in new development of coal resources at this time, a 10% inventory in the immediate future seems unnecessary.

A Class I inventory was completed for all right-of-way windows. The results of this file search indicated that potential site density was moderate to high and that there could be potential conflicts between R/W corridors and cultural resources. However, it was also determined that impacts to the cultural resources could also be mitigated. The land allocations made to designate right-of-way windows was decided the best use of these areas within the multiple-use scheme of the Bureau.

Mr. Ron Fellows
June 3, 1987
Page 3

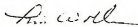
L215

I noticed that in all the alternatives vandalism is expected to increase. This is attributed to access and population increases associated with mining. Increased access associated with the mines should be considered as an effect resulting from the undertaking. These impacts should be explicitly addressed in determinations of no adverse effect. The Resource Area Plan should address this potential problem instead of treating vandalism as an unavoidable eventuality. Specific provisions need to be developed and implemented to insure that vandalism does not increase. I suggest that specific provisions for monitoring, public education and targeting potential vandalism problem areas be integrated into the Management Plan.

I hope that these comments will be useful as you begin to prepare the final version Management Plan. Please contact my office if you have any question.

Thank you for giving me the opportunity to comment.

Sincerely,



Thomas W. Merlan
State Historic Preservation Officer

TWM/JMO

cc: Landon Smith, New Mexico Archaeological Council

L215: Page 3-57, addressing impacts from leasing, recognizes the potential for indirect impacts and proposes mitigation through "public education, signing, and monitoring programs as well as with law enforcement support."



Chevron USA Inc.
6400 South Fiddler's Green Circle, Englewood, CO 80111, P.O. Box 598, Denver, CO 80201

M. H. (Lisa) Fleische
Staff Analyst
Legislative and Regulatory Affairs

June 3, 1987

36

Draft RMP/EIS
Farmington Resource Area

Mr. Doug Burger
RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service #104
Farmington, NM 87499-4104

Dear Mr. Burger:

Chevron commends you for the fine job of compiling the draft Farmington Resource Area RMP and EIS. However, we have several concerns we would like to bring to your attention.

L216 Our most serious concern relates to the Farmington No. 15 stipulation on page P-6. We do not understand when this stipulation would be used, and are concerned about such a potentially crippling stipulation being used without adequate justification. The BLM has been directed by the IBLA not to use a No Surface Occupancy stipulation arbitrarily. Under the Robert G. Lynn decision (74BLA 383), the BLM is required to consider whether measures less restrictive than No Surface Occupancy would be sufficient to protect the public interest. The IBLA maintains that a NSO stipulation should only be used as a last resort and that the necessity for such a restriction must be documented.

This same direction concerning the use of NSO stipulations is also contained in the BLM's Supplemental Program Guidance for Energy and Mineral Resources. Consequently, you must fully disclose your rationale for the use of this Farmington Stipulation No. 15, as well as indicate the specific area on which this stipulation would be used.

L217 Our second most serious concern relates to page P-2, where it is stated "This RMP attempts only to identify areas where surface resources, values, and users will require special management." However, you then list the number of acres that will be affected by each stipulation, but you do not show where these acres are located. It would be of great value to the public if you would incorporate a map into the plan that would show exactly where these acres are. This would be especially helpful for those stipulations that are applicable to more than one geographical area, such as Farmington Nos. 1, 3, 4, 13, 14, 15, 16 and New Mexico No. 7.

This type of mapped information is critically important to the public because without it the planning documents are of little value. Of particular importance is the ability of the public to determine how the seasonal stipulations overlap, so it can be seen whether or not the access to a particular area is precluded due to the overlap of stipulations.

L218 Thirdly, we are concerned that you did not include the Farmington Nos. 6 and 7 stipulations on page P-3, precluding us from the opportunity to comment on them.

L216: The NSO stipulation has not been and will not be used arbitrarily. It will only be used when it is necessary to protect resources of national significance (e.g. Threatened or Endangered species, certain cultural resources) that cannot be adequately protected by less restrictive stipulations such as Farmington no. 14 or 16. Maps of these areas with more detail than those presented in Appendix 1 are available to companies and individuals with legitimate interest in these areas and are attached to all lease offerings before sale. To publish more detailed location information in a public document would be a violation of the BLM's responsibility to protect these sensitive resources.

L217: Areas affected by Farmington No. 4 and No. 13 were delineated in previous approved planning documents. Areas affected by Farmington No. 1 vary yearly depending upon which nests are occupied. Maps of all other areas affected by these stipulations are presented in Appendix 1.

L218: Farmington Nos. 6 and 7 are no longer valid since the areas they were applied to have been declared wilderness and are non-discretionarily closed.

Mr. Doug Burger

-2-

June 3, 1987

L219 [Finally, we have two minor corrections for you. On pages i-1 and i-2, it is stated that the planning area encompasses approximately 1,508,450 public surface acres, and yet on page 3-43, the sum of the figures in the last column titled "Total" adds up to 1,929,000 acres. How do you account for this discrepancy?

L220 [Another minor correction is that on page P-2, the Farmington No. 13 stipulation was not included in Table P-1.

Thank you for your consideration of our comments.

Sincerely,



M. M. Fiesche

L219: Certain stipulations apply to federal minerals under non-public surface. Thus the affected acreage is more than the total public surface acreage.

L220: No acreage was affected under this stipulation. The stipulation was eliminated in late 1986 and will be deleted from the final plan.

MMF:js



Amoco Production Company

Denver Region,
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303 630-4040

Neil W. Allen
Regional Environmental
Safety and Utilization Manager

June 3, 1987

RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

File: NWA-270-031

Draft Resource Management Plan and
Environmental Impact Statement (EIS)

Amoco Production Company, a wholly owned subsidiary of Amoco Corporation, is incorporated for the purpose of exploring for and developing oil and gas resources. We have extensive operations and a substantial leasehold position within the boundaries of the Farmington Resource Area, and as a result, have great interest in the subject draft management plan and EIS. Amoco appreciates the opportunity to comment on the plan and the EIS.

It appears that the document has been well written to address the many concerns of the Farmington Resource Area. It is also encouraging to see that oil and gas/mineral activity has been integrated into the overall planning process. While we believe that the document provides for promoting oil and gas activity within the resource area, there are some questions and concerns with the plan and EIS. We have elected to outline these by chapter or appendix along with comments and recommendations we have concerning each issue.

Chapter 1-Plan Alternatives

The analysis for the various management alternatives emphasizes a large amount of land exchanges. It is clearly evident in reviewing the draft document that land ownership adjustments will be a critical part of implementing any resource management plan. However, implementing a land adjustment program could conflict with the direction of at least one of the two alternatives proposed by the plan.

L221 For example, under the resource production alternative "C" it is stated that exchanging or selling 396,582 acres of surface land would complicate saleable mineral exploration and development due to severed federal minerals (split estate lands). This appears to be in direct conflict with the goal of promoting resource production under this alternative. However, past experience in other parts of the Rocky Mountains has shown that BLM's approach toward the private surface owners has a direct bearing on how permitting and right-of-way acquisition progresses. Policies that do not acknowledge private surface owner preferences will certainly complicate future dealings for both BLM and industry. We would recommend that the Farmington Resource Area develop a written strategy in dealing with private land owners if and when land exchanges occurred. Examples of issues in the past which have caused conflicts with private surface owners have been those dealing with cultural resource management, well location siting, reserve pit and/or produced water disposition and reclamation. A policy that would acknowledge private land owner preferences on various issues would be beneficial when considering a possibility of dealing with a large amount of split estate lands.

In comparing the various alternatives, we are concerned about acreage with high or moderate potential for oil and gas that will be constrained by special stipulations or withdrawn through discretionary closings. While we understand the need for BLM to provide for special stipulations or special management areas pursuant to multiple use management guidelines, the amount of withdrawn land within the state of New Mexico is cause for concern. According to BLM's statewide draft environmental impact statement on wilderness study recommendations, the state of New Mexico already has 1,944,426 acres of land which is withdrawn with high and moderate oil and gas potential. While only a small portion of the Farmington Resource Area would include withdrawals, the fact remains that valuable oil and gas resources will be forgone where special stipulations or discretionary closings inhibit access and operations within those areas. In comparing the various alternatives presented, Amoco can endorse a policy that will minimize the amount of discretionary closings and restrictive constraints on land with high and moderate potential for oil and gas. Out of the four plan alternatives presented, alternative "C" is closest to this objective. When compared

L221: While BLM is well aware of the problems associated with split estate lands, the Farmington Resource Area feels that the proposed plan provides the best approach to providing a balanced solution to the complex and competing resource uses present in the FRA. Existing policy and regulations provide detailed guidance for dealing with split estate lands.

with the preferred alternative "D," management plan "C" would provide for 43,000 additional acres of land available for oil and gas leasing with high or moderate potential. This would occur by not constraining those lands with restrictive stipulations or discretionary closings.

L222 Amoco feels strongly that areas with high or moderate potential should be leased unless the areas have been withdrawn due to non-discretionary reasons or are technically unsuitable for surface occupancy.

L222: The amount of discretionary closings and restrictive constraints on leasing is minimized by placing management prescriptions on only those areas where the activity is not compatible with the stated goals.

L223 Once a management plan is adopted for implementation in the Farmington Resource Area, it is recommended that lands with special stipulations or discretionary and non-discretionary closings be indicated on maps. While many of the areas are shown in Table P-1, the exact location of these lands is not clearly evident. If operators are to be in a position to determine what areas may be prohibited or protected with special stipulations, a reference map is a necessity. If the information could be provided, this would reduce surprises at lease issuance and avoid future confusion by operators in meeting agency management guidelines. We recommend these maps be distributed as part of the final EIS and planning document.

L223: See responses to comments L216, L217 and L220.

Chapter II--Effected Environment

L224 In reviewing the analysis provided on minerals, there is a large amount of production statistics given for both oil and gas. However, there was an absence of information indicating oil and gas revenues that have been generated. The revenues generated by oil and gas is important information the public should be provided. Therefore, it is recommended that information be obtained from the Minerals Management Service specifying the royalties that have been generated from mineral development within the resource area for last year and a historical block of time. If this is not possible, then a statewide summary should be included.

L224: The data for royalties collected for the last year are not readily available in a useful form. However, data for previous years are published by New Mexico and a table of these data has been added in Appendix P of the draft RMP. Although only part of Rio Arriba and Sandoval Counties lie within the FRA, most of their oil and gas production is thought to come from within the FRA boundaries.

Appendix B

The introduction of this appendix stresses the general presentation concerning the establishment of special management areas (SMA's). It is stated in the draft document that detailed activity plans for each SMA will be developed after the resource management plan has been approved. At

L225 the same time, however, it is also stated that some prescriptions will be implemented upon resource management plan approval. In reviewing the number of SMA's included in this appendix, it is difficult to determine mineral availability in all cases. Some areas address minerals directly, while others contain no mention. Is it safe to assume that if activity has been occurring in the areas and no specific management prescription is listed for minerals, it will be allowed to continue? Or if no specific mention is made, are management prescriptions to be developed later in a detailed plan? With these pending questions, we ask that clarification be given as to which SMA's fall into what category-either immediate prescription implementation or further detailed study. Without this information, we cannot determine in all cases whether mineral activity will be allowed. Amoco recommends this policy be clarified in the final document.

Appendix P

L226 Farmington Stipulation No. 1 - This particular stipulation, while allowing for an exception, is cause for concern due to the number of nests raptors may develop in a given area. Some species develop multiple nests in an area and only utilize one in a given year. It is recommended that all nests sites be inventoried in the Farmington Resource Area on a regular basis to better identify those that are actually being utilized. If this information can be kept current, exception requests can be acted upon expeditiously.

L227 Farmington Stipulation Nos. 8, 9, 10, 11, and 12 - It is important to note that careful consideration must be given before attaching these stipulations to either recreation areas or areas of critical environmental concern (ACEC). A "no leasing" stipulation obviously is one which causes great concern to industry. It is important to note that in some cases, part or most of any particular SMA could be compatible with mineral activity. The determining factor would be the affect of the activity on the integrity of the values justifying special management. It is important to acknowledge that technological advances in conducting wellsite operations are constantly evolving. These advances could allow future activity consistent with management framework for the special area. It is our belief that

L225: Unless stated otherwise in SMA management prescriptions, mineral development activity will be allowed as it presently occurs under the direction provided by continuing management guidance. Additional clarification has been added to the introduction of Appendix 1 concerning valid existing rights.

L226: This is now a standard operating procedure. In the last two years the raptor nest monitoring study as described on page 2-17 of the draft RMP has been expanded to include the entire Resource Area.

L227: Refer to response L222. Should technology advance to the degree mentioned during the life of this plan, it would be reasonable to revisit the no leasing stipulation.

leaving the areas open for leasing and attaching a stipulation similar to that of Farmington No. 13 would be more appropriate than no leasing. This procedure would allow the area to be leased and give the operator an opportunity to submit a plan of operation to the surface management agency. The agency could then issue a determination whether the proposal is compatible with the intended special management area guidelines. Amoco requests this approach receive consideration.

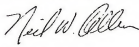
L228 Farmington Stipulation No. 15 - The first stipulation listed under no surface occupancy should be specified to state under what conditions it will be used. For example, if the reason is due to steep slopes or unstable soils, this should be stated. This will eliminate any unknowns to the operator when accepting the lease and also give justification for reasons why the area cannot be occupied on the surface.

L228: See response to comment L216.

Conclusion

In general terms, Amoco believes the draft environmental impact statement and the management plan effectively addressed concerns dealing with issues significant to the Farmington Resource area. While the Farmington Resource Area Management Plan does facilitate oil and gas exploration and development on the majority of its acreage, Amoco is concerned that remaining areas with high or moderate oil and gas potential could be withdrawn or severely restricted from future activity. With efforts to reduce our dependence on foreign sources of energy, it is imperative that potential domestic resources be evaluated to the fullest extent possible. With the vast mineral resources within the Farmington Resource Area, this objective should receive emphasis in developing land management guidelines.

Thank you for considering our comments to the Farmington Resource Management Plan EIS.



DRB/cah

CC:
R. J. Broussard - Farmington

LTR173

June 2, 1987

District Manager
Bureau of Land Management
Albuquerque District

Re: Draft Farmington RMP

Dear Mr. Applegate:

Herein is my comments regarding proposed future actions for management or disposition of BLM lands in the Farmington Area. The proposed plan if implemented would allow the BLM to divest itself of nearly 325,000 acres of lands having coal and other minerals values. It is noted that the report does not specify the recipients of these transfers which undoubtedly would be the Navajo Tribe. The report is insensitive to what can and most likely will happen if the Navajo Tribe is allowed to acquire these lands. The scenario and impacts will likely be as follow:

- 1) The Tribe will ask for and likely receive Federal funding for purchase or exchange of all public domain within the "Exchange" area. This will be to the detriment of all private interests having inholdings within the area.
- 2) Once acquisition of the public lands is complete (or in steps as it progresses) the Tribe will ask Congress to extend the boundary of the reservation to include the entire area. Without sufficient private and/or state inholdings in the exchange area, Congress will be under pressure and obligation to comply with this request.
- 3) Once this is complete all business and private interests will become hostage and subject to spurious tribal taxation, tribal ordinances and jurisdictional problems not heretofore experienced. The state will be forced to divest itself of its' inholdings with loss of revenues from grazing income and mineral severance taxes. San Juan and McKinley Counties would lose "in lieu of taxes" now being paid on BLM lands. The State would lose the mineral leasing payments now derived from BLM lands.

It is commendable that BLM is interested in efficient management and conservation of land and resources under its jurisdiction, however divestiture of hard to manage lands, as is proposed in this report, is not in the public interest when socio-economic impacts in today's climate is considered. BLM under the mandate of FLPLMA is obligated to fully consider the impacts on the local citizenry, non-tribal as well as tribal, and on state and local government jurisdiction by the proposed actions. BLM through the Department is further obligated to recommend to the Congress ways to minimize adverse impacts and to quickly point out that the requirements of existing law (FLPLMA) are being diverted or ignored.

As a taxpayer, citizen, and one who has been an avid student of history on Federal Indian Policy, I have grave misgivings about the divestiture by exchange or otherwise and adamantly oppose it under existing conditions.

Sincerely yours,

James L. Mitchell
Canyon Route Box 18A
Jemez Pueblo, NM 87024

L229: Although the Navajo Tribe would seem to be a likely candidate for public lands in the exchange zone, proposals for exchanges are not limited to the Tribe. The impacts of the proposed action are considered in the Draft, Environmental Consequences Chapter.

L230: Comment noted. Divestiture by exchange will help to resolve the land ownership adjustment issue and provide the public with a return for public lands instead of direct transfer of public lands through Congressional actions without a return, as has historically been the case.



United States
Department of
Agriculture

Forest
Service

Southwestern
Region

517 Gold Avenue SW
Albuquerque, NM 87102

Reply To: 1950

Date: June 3, 1967

39

Bon Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Culter Service 4104
Farmington, NM

Dear Mr. Fellows:

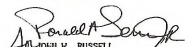
The Forest Service, Region 3, has reviewed the Farmington Resource Management Plan and DEIS. We found no conflict with your proposal that will affect our ability to meet the Forest Service Mission.

L231

Your documentation preparation was adequate for us to get a perspective on the environmental effects of your proposal. We appreciate the opportunity to be informed and involved in your activities.

L231: Comment noted.

Sincerely,


JOHN W. RUSSELL
Director of Land
Management Planning

cc:
WD-EC





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

ALLIED BANK TOWER AT FOUNTAIN PLACE

1445 ROSS AVENUE

DALLAS, TEXAS 75202

40

JUN. 9. 1987

REPLY TO: 6E-FT

Mr. Bill Overbaugh
Research Management Plan
Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

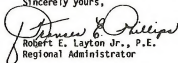
Dear Mr. Overbaugh:

In accordance with responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Region VI office of the Environmental Protection Agency (EPA) has reviewed your Draft Environmental Impact Statement (EIS) on the proposed Farmington Resource Management Plan (RMP).

We have rated the draft EIS as LO-1 (Lack of Objections - Adequate). Specifically, we have no objections to the project as proposed. Our classification will be published in the Federal Register according to our responsibility to inform the public of our views on the proposed Federal actions, under Section 309 of the Clean Air Act. The enclosed comments are offered for your consideration to strengthen the document. If you have any questions concerning these comments please contact Norm Thomas at (FTS) 255-2260 or (214) 655-2260.

We appreciate the opportunity to review the Draft EIS. Please send our office one copy of the Final EIS at the same time it is sent to the Office of Federal Activities, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

Sincerely yours,


Robert E. Layton Jr., P.E.
Regional Administrator

Enclosure

GENERAL COMMENTS

WATER QUALITY AND WATERSHED MANAGEMENT

- L232 [The resource management plan should be consistent with Section 303 and 208 state water quality management plans. Also the best management practices should be utilized and maintained within the resource management plan.

RANGELAND MANAGEMENT

- L233 [There is no correlation between range conditions and areas considered for mining. Many rangelands in poor condition will have marginal improvement without extensive manipulation (reseeding, brush control) that may not be economically feasible. However, after surface mining reclamation and reseeding the poor condition areas have the potential to be reclaimed with improvement in rangeland condition.

MINERAL DEVELOPMENT ACTIVITIES

- L234 [Discussions should include processes for handling refuse and sewage disposal, special waste and hazardous waste. Compliance with Executive Order 11998 - Floodplain management should be acknowledged and floodplain development should be restricted. Specifically in Criterion No. 16, we consider mining in floodplains to have an unacceptable water quality impact.

CLEAN WATER ACT, SECTION 404(b)(1) GUIDELINES

- L235 [We recommend the Corps of Engineers Section 404 Dredge and Fill Permit Program be described. Recommendations from the Corps concerning discharges into streams, lakes or wetlands will determine the need for an individual permit.

CUMULATIVE IMPACTS

- L236 [Proposed herbicide and pesticide applications should be coordinated through cooperative management plans with other agencies. Multiple treatments by various agencies can overlap on the same lands, such as the grasshopper control program and rangeland management programs of the U.S. Department of Agriculture and the U.S. Department of the Interior, respectively.

L232: Please see page 1-13 of the draft RMP for a statement about participation with the state in water quality management, as well as information that outlines management practices that will be used.

L233: Please see the response to comment L41.

L234: Processes for handling refuse, sewage disposal, etc. are spelled out in various regulations and guidelines and will be followed. Both E.O. 11998 and Unsuitability Criterion Number 16 are recognized as part of continuing management guidance.

L235: This program is covered by the regulations described in the Federal Water Pollution Control Act, and as such would be addressed as continuing management guidance. Section 404 provides for the Corps of Engineers to issue permits for the discharge of dredged or fill materials into navigable waters with oversight by the Environmental Protection Agency. The Corps would be responsible for permitting discharges into the San Juan and Animas Rivers.

L236: As was stated in Appendix M of the draft RMP, the BLM has a Memorandum of Understanding with the New Mexico Department of Game and Fish that requires consultation prior to proposed applications. Because state lands are scattered throughout the Farmington Resource Area, close cooperation and consultation is necessary with this agency. To date, no treatments have been implemented on areas that encompass both BLM and USDA Forest Service lands.

ROBERT J. NORDHAUS, P.A.
B. REG. HALTOM
LESTER K. TAYLOR
ALAN R. TARADASH
PAUL C. FRYE
WAYNE H. BLADH
JONATHAN L. JANZEN
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41

June 16, 1987

RMP Team Leader
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

Re: Draft Farmington Resource Management Plan

Dear Sir or Madam:

Pursuant to my earlier telephone conversation with Mr. Fellows, I am submitting these comments on the draft RMP ("DRMP") on behalf of the Navajo Nation. Based on this conversation, I understand that (because of court-imposed deadlines) the comment period will not be formally extended by BLM, but that these comments will be considered in the formulation of the final RMP. If I am in error in this respect, please consider this a formal request for an extension of the comment period until June 16, 1987. The Navajo Nation appreciates the opportunity to comment on the DRMP.

1. Existing Land Status

L237 The DRMP includes maps which do not accurately portray the existing status of lands in the Farmington Resource Area ("FRA"). This is true as to both record title and the actual beneficial title of the Navajo Nation. I understand from our meeting in Farmington that corrected maps will be made, using BIA and, perhaps, Navajo input.

L238 With respect to the actual beneficial interests of the Navajo Nation in the area, the final RMP should reflect that the Navajo Nation does not relinquish its claim to all unallotted lands within the boundaries of the Extension to the Navajo Reservation created by Executive Order 709. As you know, the restorations of lands by Executive Orders 1000 and 1284 contravened section 25 of the Act of May 29, 1908, 35 Stat. 444, 457, and are therefore void as exceeding the Presidents' authority. See Exhibit A. The claim of the Navajo Nation to these unallotted lands was dismissed on jurisdictional grounds by the Tenth Circuit,¹ but such a jurisdictional disposition does not prevent the Navajo Nation from continuing to assert its title to the unallotted lands. Block v. North

¹ Navajo Tribe of Indians v. State of New Mexico, 809 F.2d 1455 (10th Cir. 1987).

L237: See response L35.

L238: As a result of the January 12, 1987 BIA/Navajo Land Transfer Justification Report and a January 30, 1987 meeting in Santa Fe, we have taken the position that certain substantially improved E.O. and PLO lands can be transferred to the Tribe. We are also working with our Solicitor to resolve the E.O. 1483 and E.O. 709/1000 issue.

In our March 6, 1987, meeting in Albuquerque, our State Director, Larry Woodard, indicated that BLM would not be opposed to transfer of the PLO 2198 lands to the Navajos provided the BLM gets some compensation, preferably land, in return.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 2

Dakota, 401 U.S. 273, 292 (1983). The Navajo Nation need only "adopt a different line of attack." State of N.D. ex rel. Bd. of University v. Block, 789 F.2d 1308, 1314 (8th Cir. 1986).

Other lands in the FRA mentioned in the DRMP should also be considered held in trust of the Navajo Nation, irrespective of the merits of the claim asserted in Navajo Tribe of Indians v. State of N.M., supra. The historical documentation is clear, for example, that the reconveyed lands which are "withdrawn for Indian use" (DRMP, 2-7) under Public Land Order 2198 were intended by Congress to be held in trust for the Navajo Nation. A clear statement of this is found in a Senator Wheeler's comments in a report in 1931.

Senator Wheeler. Let me understand you. Is [the Act of March 3, 1921] may not provide it, but if there was an exchange -- for instance, if the department exchanged public lands for white land, of course the white land would go to the Indians, there would not be any question about that, whether the rules and regulations provided for it or not because that was the intent of Congress of the United States.

Survey of Conditions of the Indians in the United States: Hearings Before a Subcomm. of Senate Comm. on Indian Affairs, 71st Cong., 3d Sess.

Further, in light of two opinions of the Field Solicitor determining that Executive Order 1483 lands are now held in trust for the Navajo Nation, and in light of two opinions of the Interior Board of Land Appeals² holding in essence that unallotted areas described in Executive Order 1000 are held in trust for the Navajo Nation, the Navajo Nation does not read the DRMP as allowing for the possibility of any change in status of these lands by Interior, as such would be prohibited by law. E.g., 25 U.S.C. § 398d. However, to avoid the kinds of errors made by subordinate Interior employees which led to the two IBLA cases cited, we feel that trust patents confirming the Navajo Nation's beneficial title to all of these areas should be issued.

2. Occupancy

The DRMP repeatedly refers to unauthorized occupancies. See, e.g., pages 1-7, 1-8, 3-1. The problem with BLM's approach is that BLM does not know yet the extent of individual aboriginal occupancy rights in the FRA. Shortly after the decision in United States v. Santa Fe Pac. R. Co., 314 U.S. 339 (1941), a plan was developed to determine the extent of such rights in the San Juan Basin. Survey instruments were

² Tenneco Oil Co., 8 IBLA 272 (1972), The Navajo Trib., 82 IBLA 387 (1984). As these cases and other opinions indicate, BLM does not have the authority to lease under the mineral leasing acts or to set aside as "Special Management Areas" lands within an Executive Order reservation.

L239: The BLM recognizes that E.O. 1483 lands are placed in trust status. We are currently reviewing our options on the future disposition of the 17,442 acres involved. The Draft RMP makes no changes in this status. The issuance of patents is outside of the scope of the RMP and can be pursued through normal administrative procedures.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 3

designed and schedules of meetings in various Chapter houses were discussed. On every occasion, however, the employees of the General Land Office and of the Indian Service were unable to coordinate; after about ten years of planning, the project simply disappeared from sight. See composite Exhibit B, representative documents regarding this proposed effort.

As a result, there are families and individuals with extensive claims to occupancy rights. Such rights are as "sacred as the fee," include the surface and subsurface, extend over customary grazing areas, and are unextinguished.

L240 [Thus, the final RMP should specify that no lands shall be conveyed or leased to any non-Indian person or entity prior to a determination of occupancy rights of Navajos pursuant to the proper standards, set out generally in the correspondence from 1944-1954 referred to above. See also, former 43 C.F.R. § 2091.5.³

3. Consultation

As state judges and the District Attorney's office has recognized, practically all of the lands from Farmington to Cuba, New Mexico, should be considered "Indian country." See Exhibit C. The State of New Mexico has disclaimed all jurisdiction over "Indian country," *State v. Ortiz*, 731 P.2d 1352, 1356 (N.M. App. 1986), and the tribes and federal government share exclusive civil and criminal jurisdiction over "Indian country," in general. See, *California v. Cabazon Band of Mission Indians*, 107 S. Ct. 1083, 1087 n.5 (1987).

L241 [Therefore, prior consultation with the Navajo Nation's Office of the Chairman was required here, but it has been inadequate. Effective consultation with the Navajo Nation did not begin until after publication of the DRMP, i.e., after the priorities and many of the fundamental choices had been established by BLM.

L242 [This is evidenced by the seven priorities for land transfers, where the top priorities are state lien selections and state exchanges. E.g., DRMP, I-38.⁴ BLM proposes only a "Governor's Consistency Review." DRMP, I-5. A Chairman's Consistency Review would be more appropriate, given (1) approved tribal resolutions and Congressional acts designed to facilitate Navajo land acquisitions and consolidations in the Eastern Navajo

³ The recent deletion of the occupancy regulations was not intended to change the duties of resource managers, see, 52 Fed. Reg. 12171, 12172 (April 15, 1987), nor can it affect the validity or invalidity of leases or preference right lease applications where occupancy rights existed on the date of the lease or application.

⁴ For similar reasons, the management prescription to pursue the transfer of the Betonnic Tsosie SMA to New Mexico is objectionable. It appears that Navajo Community College will soon be an accredited four-year institution, and transfer of this SMA to the Navajo Nation for its institutions of higher learning should be the management prescription.

L240: We usually work with BIA to resolve individual Indian rights on public land. Existing users are recognized in the sale regulations (43 CFR 2711.3-3) and existing occupancies in 43 CFR 2091.5. Perhaps this is a subject that should be referred to the work groups established in the proposed Tri-Party Agreement for further consideration.

L241: The record shows that the Navajo Tribal Chairman and Vice Chairman were consulted in May 1985 at the issue identification stage of the RMP. Since that time the Bureau has met with many individuals representing the BIA and Navajo Tribal government including thorough consultation with your office and establishment of a special liaison group. Refer to Chapter 4 for a partial listing of consultation efforts with the Navajo. These contacts were extremely crucial and very helpful to the success of the RMP. The only planned formal consultation after draft publication was cancelled by the Vice Chairman.

L242: Page I-5 of the Draft, Step 8 identifies the Governor's Consistency Review. This is not a proposal but a regulation, 43 CFR 1610.3-2(e). There are no known inconsistencies with any land use plan of the Navajo Nation. In fact, the RMP facilitates and complements Indian land consolidation plans. The priorities for land transfers are Bureau policy as it is identified in the Continuing Management Guidance section. This policy applies statewide and is not directed to the exchange zone in the Farmington Resource Area to which your concern is directed.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 4

Agency, (2) clear public policy -- buttressed by the special relationship between the United States and the Navajo Tribe of Indians -- favoring the legitimate interests of the Navajo people in the Eastern Navajo Agency, (3) the acknowledged "strong interest" of the Navajo Nation in acquiring available land in the area (DRMP, 2-36), and (4) the need to clear up historic and present land tenure questions in this area.

The lack of appropriate consideration of Navajo interests is also reflected in the DRMP, at 0-7, where -- despite the acknowledgment of BLM that PLO 2198 lands were set aside for the benefit of the Navajo Nation, BLM consulted with neither the BIA (with federal surface managing authority) nor with the Navajo Nation in carrying forward the Catalpa Canyon tract. Further, the Navajo Nation has submitted to BLM detailed proposed stipulations for insertion into any leases, as had the BIA. We have not received any response from BLM, and neither the EIS nor the DRMP contain an appropriate discussion of lease stipulations.

The Navajo Nation looks forward to cooperation with BLM in resolving the land issues in this area.

4. Social Concerns

The DRMP repeatedly qualifies the social concerns of Navajos with respect to the resource issues in the RMP as "potential" concerns. DRMP, at 5-10, 1-48, 3-32, 3-60. Clearly, these issues have already aroused deep and wide-spread concerns of Navajo people in the Eastern Agency and of the Navajo government generally, as Chapter meetings and public hearings for the past decade indicate. The study of G. Mark Schoepfle, Ph.D., which is referred to occasionally in the DRMP (see 3-32, 3-60) should be referred to for what it concludes with respect to coal mining:

Unhappily, the findings of the following report lend not a single exception to what appears to be a worldwide trend in economic development: the nation or region, on the whole, may benefit from development while those directly affected will lose, and have to pay inordinately for the rest.

Schoepfle, et al., A Study of Navajo Perceptions of the Impact of Environmental Changes Relating to Energy Resource Development, Nav. Comm. Coll., Office of Research and Development (1979), at 5." The "short term" but "rather severe" social impacts (DRMP, 3-32) will be borne by Navajos, whose rights can no longer be ignored.

Similarly, the DRMP cites to other studies whose recommendations and conclusions do not support the proposed actions of BLM in the DRMP. These disparities are most noteworthy in the recommendations and conclusions with respect to protection of cultural resources; see, the 1986 study of Frederick York.

L243: A special liaison group consisting of representatives of the Navajo Tribe and the BIA, including a representative from your office, was established primarily for reviewing the coal tracts carried forward during the RMP process.

The BLM received the draft lease stipulations from the Navajo Tribe in January 1984. Those stipulations were being analyzed by the BLM State Office in the context of the San Juan Regional Coal EIS. A moratorium on most forms of coal leasing was imposed as the result of reviews of competitive and preference right federal coal leasing policies and procedures.

Recent Secretarial decisions on coal allow us to resume the preparation of a Record of Decision (ROD) for some San Juan Round 1 coal leasing initiatives. This ROD is expected to be completed about mid-October 1987, and will include a discussion of the lease stipulations presented to us by the Navajo Tribe. The decision-maker will be presented with options regarding lease stipulations for each tract that is being considered for lease. Upon completion of the ROD, a Notice of Availability will be published in the Federal Register. A complete copy of this ROD will be mailed to you once it is available.

L244: With the Navajos selecting high value coal lands in the Navajo selection program, it appears that the Navajo Nation is interested in economic coal development.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 5

5. Split Estates

L245 The DRMP acknowledges, first, that section 209 of FLPMA authorizes conveyances of both the surface and subsurface (DRMP, 1-6), second, that BLM cannot economically administer the scattered tracts of lands primarily in the southern part of the FRA (e.g., DRMP, 3-7), third, that at least 73,223 acres in the FRA are "not especially valuable for any of the minerals" (DRMP, 3-4), fourth, that traditional BLM policies do not work well in this area (DRMP, 1-7), and, fifth, that Navajo tribal and individual rights and interests result in difficulties in leasing these lands for minerals. E.g., DRMP, 3-1, 0-3, 0-28. Nonetheless, BLM apparently proposes to perpetuate its managerial headaches (and the existing land title issues noted above) by creating up to 325,000 acres of additional split-estate lands. E.g., DRMP, 3-49. This is simply not rational. I do not believe that BLM should expect much favorable response to land "consolidation" proposals which, because they only consolidate surface ownership, offer such incomplete or illusory solutions.

6. Navajo Sacred Sites

L246 The DRMP reads as if BLM considers Native American sacred sites as fungible or expendable commodities. Alternative A would protect three acknowledged sacred areas. DRMP, 3-14. Alternative B would protect five. DRMP, 3-29. The preferred alternative would protect only four (DRMP, 3-57) and would not protect Mesa Quartado or the Crane Petroglyphs, whose ongoing religious significance is noted at page B-37. See DRMP, B-3. These are sites acknowledged to have great religious significance over which BLM proposes to drop federal protection.

L247 The DRMP also implicitly acknowledges the existence of other sacred areas in the FRA. See DRMP, 3-59, B-38. Clearly, there are numerous other sacred sites which BLM's field representatives have identified.

The failure to provide protection for these sacred sites, known to BLM, does not comport with the rights of Navajos under the First Amendment to the United States Constitution nor the American Indian Religious Freedom Act.

7. Unsuitability Criteria

L248 These are suggestions in the DRMP that BLM believes that only "authorized" dwellings require a finding of unsuitability. DRMP, 0-11. Leaving aside for the moment that BLM has not yet properly determined the extent of the rights of Navajo occupants in the FRA, the Surface Mining Control and Reclamation Act of 1977 extends protection to "occupied dwellings," without qualification. 30 U.S.C. § 1272(c)(5).

Moreover, the decision not to nominate eligible properties to the National Register of Historic Places -- even though eligibility has been determined -- would constitute an unlawful circumvention of the Congressional intent in the National Historic Preservation Act and subsequent legislation.

L245: The administrative difficulties cited pertain mainly to the surface estate in the southern part of the area; this plan foresees disposal of the surface. Section 209 only allows disposal of minerals under certain rather narrow constraints. The reason and intent of these constraints was to preclude the sale or exchange of public mineral resources to local or regional special interest groups. While the problems associated with the creation of additional split estate land are recognized, they are outweighed by the long-term benefits to be gained by consolidated land management.

L246: The Crane Petroglyphs are located in an area selected by the Navajo Tribe as part of the Navajo-Hopi Exchange. They will be protected until the exchange is consummated and ownership transferred to the Tribe.

Mesa Quartado was dropped from Alternative D because the BLM could not identify, nor did the Navajo Tribe identify, an area of specific concern. The size of the area and existing development also made it difficult to identify implementable management prescriptions. Numerous meetings and discussions were held with Tribal representatives in an attempt to identify areas of concern and Huerfano Mesa was the only area for which specific concerns were expressed and boundaries delineated. If the local chapter, residents, or Tribal representatives can provide us with boundaries and management recommendations, Mesa Quartado can be designated as an SMA at a later date (see page A1-34).

L247: The BLM knows of no other sacred areas at this time. We made repeated attempts to work with the Tribe in identifying areas (see list of contacts) but were only asked specifically to protect Huerfano Mesa. The remainder of our decisions were based on published documents such as Van Valkenburgh 1974.

L248: The BLM fails to understand how such a suggestion can be inferred from the text on page A1-11.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 6

As the DRMP states, NHPA requires federal agencies

to establish a program to locate, inventory and nominate all properties under the agency's ownership or control that appear to qualify for inclusion in the National Register.

L249 DRMP, 1-20.⁶ Given that spotty (see DRMP, 2-25, 2-26) inventories have already located 2,195 sites which appear to be eligible for inclusion in the National Register, (DRMP, 2-28), including 228 sites on lands with coal development potential (DRMP, 0-24), BLM's "goal of one nomination per year" (DRMP, 2-27) is wholly inadequate. Class 3 inventories of potential coal lease tracts must be completed, and nominations of eligible sites made, prior to leasing decisions in order that BLM apply properly the land management and unsuitability screens prescribed by Congress. Compare, DRMP, 3-14 (Class 3 inventory to be required prior to exchange or sale of federal lands).

L250 Similarly, the deferral of detailed inquiry into family burial sites is inappropriate. As a recent rulemaking notes, such burial sites are considered "cemeteries" unsuitable for surface coal mining. 52 Fed. Reg. 4261. (February 10, 1987) The "screens" are appropriately employed to determine at the outset which tracts have true development potential; deferral of the problematic ones until activity planning will result not only in administrative inefficiency, but is likely to result in a momentum which favors development despite proper legal objections to development decisions. See DRMP, 0-6 to 0-7, notes a, c and m.

8. Continental Divide National Scenic Trail

L251 The DRMP contains at least confusing and perhaps irreconcilable statements with regard to the Continental Divide National Scenic Trail ("CDNST"). Compare DRMP, at 2-30, 0-22, and P-2. The final RMP should clearly identify proposed and alternative routes for the CDNST, and apply New Mexico stipulation No. 6 and multiple use screen No. 4 accordingly.

L252 Similarly, page 0-2 of the DRMP suggests that the four land-use planning screens for coal have not been applied ("once all four land-use planning screens for coal have been applied to the tracts, the remaining federal coal contained therein will be considered acceptable for further consideration for leasing") but pages 1-9 and 1-31 state that the screens have been applied and re-applied. It would be helpful to state which screens have been applied, which have not, and the plan for utilizing any screens not employed for any particular tract to date.

⁶ Compare, DRMP, 0-24: "Sites were identified and determined eligible to the National Register but have not been listed and it is unlikely that formal nominations will be completed." See also, DRMP, B-45 (regarding Halfway House and Twin Angels ACECs), and 3-43 (Canada Larga), 1-11 (no NHPA [and, thus, no NEPA] compliance in the southern portion of the resource area).

⁷ See also, DRMP, 0-6 to 0-7, notes a, c, and m.

L249: See comments L196 and L204 regarding determinations of eligibility for compliance with the NHPA and completion of nominations to the National Register.

L250: Deferral of detailed inquiry to a later date was a management decision based on interviews conducted by a professional ethnographer (see response L33). The individuals interviewed believed burials to be present but could not give specific locations. If burial sites can be specifically identified, the multiple use screen no. 17 and its exception will be applied prior to any leasing or surface disturbing activity. As stated in the screen, the wishes of the family members will be followed.

L251: The text is confusing due in part to continued planning and various trail alternatives identified in the CDNST Comprehensive Plan. The Continental Divide SMA has been added to clarify the situation instead of referring the reader to the comprehensive plan. New Mexico stipulation #6 and multiple use screen #4 have been applied, refer to page P-2, Table P-1, and page O-22 respectively.

L252: The four land-use planning screens have indeed been applied. The statement which is quoted from page O-1 (not O-2) has been modified.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 7

9. FLPMA Issues

L253 The land consolidation policy of the Navajo Nation in "Indian country" which comprises the Eastern Navajo Agency has been formally stated by the Navajo Tribal Council, 16 N.T.C. § 1(1), and has been historically recognized and encouraged by the federal government. E.g., Act of March 3, 1921. See Exhibit D. There should be no dispositions of lands or minerals in the Eastern Navajo Agency to non-Indians. See DRMP, I-8 and 4-2 (citing 43 C.F.R. § 1610.3-2). The final RMP should state this unequivocally.

L254 FLPMA requires that in disposing of public lands preference be given to current users, owners of surrounding lands, and others with equities in the area. 42 U.S.C. § 1713. See also, 43 C.F.R. § 2710.0-6, with regard to those inadvertently occupying public lands. The DRMP recognizes (although without much emphasis) Navajo use, ownership, and equities to the lands in the Eastern Navajo Agency. E.g., DRMP, I-27 to I-28, 2-33, B-38 (regarding proposed MOU with Navajo Nation on sacred sites), H-1 to H-6 (accreages under MOU with Navajo Nation for land administration), and Map C. See also, Exhibit D. The final RMP should prescribe that this preference be honored strictly in the portion of the FRA which is within the Eastern Navajo Agency. See also, DRMP, 3-21, stating that grazing operators are typically not displaced as a result of land exchanges.

L255 The regulations require that coal deposits be developed not only in "consultation, cooperation, and coordination" with Indian tribes, but also with "involved federal agencies." DRMP, O-1. Unfortunately, the productive process which had been undertaken by FRA and the Bureau of Indian Affairs has not been employed in recent years. We suggest a resumption of this process and look forward to future progress with BIA and BLM.

L256 The creation of a coal-belt SMA is not consistent with FLPMA. Multiple uses of 77,945 acres of lands with a rich, varied, and significant combination of resource values is subordinated to a single "use": the extraction by surface mining methods of coal for which there is no foreseeable demand. The Navajo Nation has over two billion tons of coal under lease which its lessees cannot market.⁸ The DRMP recognizes (e.g., DRMP, 2-2) the harsh environmental realities in the proposed SMA, and previous studies of BLM and others suggest strongly that reclamation of the PRLA and competitive tracts will be unsuccessful. It is not enough to say that SMCRA will prohibit mining if reclamation cannot be performed. What is needed are critical land management judgments which reflect the realities of the marketplace⁹ and the environment. The complete lack of industry interest in new tracts (DRMP, O-2) is only one more piece of evidence of a lack of any value in devoting the 77,945 acres to a single destructive use.

L253: It is agreed that the federal government has historically recognized and encouraged the land consolidation efforts of the Navajo Nation. However, the BLM does not feel that it was the intent of the "Act of March 3, 1921" to give preference rights to any one individual, group or entity.

The citing of Federal Regulations (43 CFR 1610.3-2) referred to in this comment states that BLM planning must be "consistent with officially approved or adopted resource related plans..." Chapter 1, Title Sixteen of the Navajo Tribal Code outlines tribal policy for the acquisition of land. It is not a resource management plan approved by the Secretary of the Interior.

L254: FLPMA does not require the Secretary of the Interior to give a preference to anyone when selling land, but it does allow the Secretary the discretion to grant a preference when circumstances warrant it.

Direct sale of homelife tracts, as allowed by 43 CFR 2710.0-6, is one of the actions considered by the Navajo Occupancy Resolution Program to authorize unauthorized occupancies. However, the Navajo Tribe and the BIA have not approved the cooperative agreement formally establishing this program. This is the reason that this program did not receive more emphasis in the DRMP.

L255: Presumably you are referring to the Regional Coal Team meetings held a few years ago. These meetings have not occurred since 1984 due to the suspension in the coal leasing program. That process was a leasing process, while this RMP is part of a planning process. Coal is addressed in this plan so that future management will be aware of it as an issue, and because future coal leasing can only be accomplished after it has been addressed in a plan like this. The Regional Coal Team meetings, of which the Navajo Nation has been an *ex officio* member, are expected to resume in late 1987.

L256: See response L189 and Introduction to Coal.

⁸ A study done for the Navajo Nation concludes that net Navajo employment would fall if coal tracts under the FRA were to be mined. The employment referred to in the DRMP (e.g., DRMP, 3-32) represents, in essence, the displacement of Navajo workers at the Consoil and other mine sites, with boom and bust in-migrants. *Ibid.* ("short term" but "rather severe" social impacts).

⁹ In addition to studies conducted for the Navajo Nation and the State of New Mexico, see DRMP, 3-3.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 8

10. Legislative Alternatives

L257 [The DRMP states correctly that unique approaches need to be employed to accommodate the very real Navajo interests in the FRA. E.g., DRMP, 2-33. The land adjustments or clarifications needed for the Eastern Navajo Agency simply cry out for a legislative solution -- especially because approximately 300,000 acres of PLO 2198 and other lands were intended by Congress to be held in trust for Navajos and because the Navajo Nation's claim to title to other unallotted lands has not been decided on the merits. Conversely, with respect to lands in the Eastern Navajo Agency, the "fair market value" approach is largely inappropriate, as is the split-estate option.

L257: See response L180.

L258 [The DRMP indicates that FRA will identify new withdrawals and legislation, if needed, for occupancy resolution. The Navajo Nation strongly urges that BLM, BIA and the Navajo Nation attempt to reach agreement on a legislative package to be presented to Congress, and that the final RMP examine in greater detail -- consistent with NEPA -- the legislative option.

L258: The BLM continues to meet with the BIA and the Navajo Nation to review existing withdrawals and discuss possible new withdrawals necessary to complete land transfers needed for occupancy resolution.

11. Allottee Rights

L259 [The DRMP talks of a "network of roads" within FRA of over 10,000 miles. DRMP 1-10 to 1-11. The final RMP should reflect the fact that, over Indian allotments in much of the area, there are no approved BIA rights-of-way, there was no compensation for the roads, and that legal access to many areas is not available.

L259: The BIA, or the individual land owner, has the responsibility for granting rights-of-way across, or acquiring easements to, Indian lands. The BLM has no authority over the BIA. Consult with the BIA on this matter.

L260 [Page 1-9 of the DRMP erroneously suggests that P.L. 98-603 requires BLM to acquire Indian allottee inholdings in De-Na-Zin. A correct statement of this aspect of the law is formed at page 3-13 of the DRMP ("if all allottees concur").¹⁰

L260: The statement on page 1-9 has been modified.

L261: BLM is not disposed to address the Elicity litigation while the matter is unresolved.

L261 [In general, BLM should note in the final RMP and to allottees in negotiations that allottees may in fact own subsurface interests in their allotments despite the purported reservations of some minerals in trust patents, as is alleged in the Elicity litigation.

L262: Comment noted.

12. MOU's

L262 [As indicated in our meeting in Farmington, the Navajo Nation has agreed to the grazing MOU which has been on the table for some time now. We hope that further problems or delays within the BIA, BLM, and Tribe have been overcome. We welcome BLM's evaluation of the MOU for environmental acceptability (DRMP, 1-11). We believe that there is a general trend of improvement of the environment on lands now administered by the Navajo Nation under the MOU, and seek to continue to carry out sound management practices in conjunction with BLM and BIA.

¹⁰ Management prescriptions requiring acquisition of inholdings (e.g., DRMP, B-84 to B-85) are similarly constrained by the allottee consent requirement.

RMP Team Leader, BLM
RE: Draft Farmington RMP
June 16, 1987
Page 9

L263 [There is no stated justification in the DRMP for the proposed cancellation of the MOU with the Navajo Nation for lands within the proposed "retention zone." See DRMP, 1-40. Consistency with NEPA requires detailed explanation of the reasons for such an important decision. Such a categorical decision is not warranted by any factors known to the Navajo Nation, and the MOU should only be canceled on a case-by-case basis where the public interest demands. In addition, the "retention" zone, to the extent that it includes lands in the Eastern Navajo Agency, should not preclude Navajo acquisition of lands for its land consolidation efforts.

13. Other Comments

L264 [All prior analyses of BLM indicate that surface mining in the San Juan Basin is not feasible if the overburden exceeds a thickness of 250 feet. What new information has the BLM obtained to suggest that a 350-foot thickness is now economical to mine? (DRMP, O-2)

L265 [The comments of DNA - People's Legal Services, Inc., which I have recently received, raise many similar or related issues as those stated above. We will not burden BLM with a duplicative submission, but generally support the views stated by Mr. Stedd.

L266 [In conclusion, the FRA is to be commended for attacking directly many issues which have been avoided for most of this century. The Navajo Nation requests your careful consideration of these comments, and we look forward to an earnest, cooperative effort to resolve these difficult issues in the public interest.

Very truly yours,

NORDHAUS, HALTOM, TAYLOR,
TARADASH & FRYE


Paul E. Frye

L263: The theme of the retention zone is direct intensive management of all public land resources. See the introduction of Appendix D in the Draft. The zoning concept for land consolidation is considered to be in the public interest. The justification for the proposed cancellation of the MOU for the allotments in the retention zone is that the BLM intends to intensively manage those lands and must regain the grazing administration of them. At present the BIA administers the grazing.

L264: See response L192.

L265: Refer to comment responses L178 and L207.

L266: Comment noted.

PEF:mw
Encls.



PUBLIC SERVICE COMPANY OF NEW MEXICO

ALVARADO SQUARE ALBUQUERQUE, NEW MEXICO 87158

42

June 18, 1987

Mr. Bill Overbaugh
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, NM 87499-4104

Dear Mr. Overbaugh:

Subject: Comments on the Bureau of Land
Management's (BLM) Draft Farmington
Resource Management Plan (RMP) and
Environmental Impact Statement (EIS)

Public Service Company of New Mexico (PNM) appreciates the opportunity to review and comment on the Draft Farmington Resource Management Plan (RMP) and Environmental Impact Statement (EIS). We offer the following comments for consideration.

Preferred Alternative

L267 PNM supports the preferred alternative which allows for a variety of uses within the Farmington Resource Area.

L267: Comment noted.

Special Management Areas

Right-of-Way Windows

L268 PNM agrees with the designation of the five right-of-way windows identified in the preferred alternative for the placement of future facilities. We are willing to offer our assistance as the Farmington Resource Area develops the activity plans for the designated right-of-way windows.

L269: The placement of rights-of-way within the exchange zone has been a concern due to the land ownership patterns. The window concept as described in Appendix C of the draft was designed to provide access through the coal belt, avoid sensitive resource values and maintain flexibility in choosing routes to and from the ROW SMAs. Corridors would not be established that would lock industry into a route that may not be practical nor economically feasible. Industry would have to work with private interests in any case to establish a linear right-of-way. Because of the broken land ownership pattern the window concept is viewed as being the most viable solution compared with other methods.

L269 There is a discrepancy in the designation of the five right-of-way windows that are located within the proposed land ownership adjustment area. It appears that these windows are not viable if the remaining area surrounding the windows is identified for exchange or disposal. Please address this in Final RMP.

June 18, 1987

Land Ownership Adjustments

L270 [PNM would like to discuss with BLM staff the proposed land ownership adjustments in the Farmington Resource Area and how they may affect PNM projects. Please reference our letter to Mr. Doug Burger dated January 3, 1986 which identifies our areas of concern.

L270: Periodic land use discussions between BLM and PNM have greatly facilitated the management of public lands. The Bureau encourages this continued relationship.

Areas of Critical Environmental Concern

L271 [Our review of the proposed ACEC locations indicates that there are no conflicts with any of our existing or proposed projects. We are aware of the sensitivities of these areas and will incorporate this information in our planning process.

L271: Comment noted.

This concludes our comments on the Farmington RMP. If you have any questions regarding our comments, please contact Judy Suiter at 848-2023.

Sincerely yours,



Laurie C. Chisholm
Director, Environmental Services Section

LCC:dll

cc: Mr. R. Roberts, PNM
Ms. J. Suiter, PNM
Mr. L. Sullivan, PNM



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Deputy Secretary

43

MEMORANDUM

TO: Ron Fellows
Area Manager, Farmington Resource Area
U. S. Bureau of Land Management

FROM: Kirkland L. Jones, Ph.D.
Assistant Director
N.M. Environmental Improvement Division

SUBJECT: Farmington Resource Management Plan - DEIS

DATE: July 2, 1987.

Attached please find the comments of the New Mexico Environmental Improvement Division on the Draft Plan and Environmental Impact Statement for the Farmington Resource Area.

Thank you very much for the opportunity to comment on this document. If you have any questions, please call Sharon Murray of the EID Program Support Bureau at 827-2568.

cc: Dean Olson, Department of Finance and Administration
Tom Bahr, Secretary, Energy, Minerals and Natural Resources Department

Selection of Alternatives

The BLM has developed four alternatives which are designed to represent a full range of approaches from the most resource conservation based to the highly resource production oriented. We do not believe that Alternative D (the Preferred Alternative) succeeds in achieving a balance of resource uses, nor does it sufficiently provide long-term protection for the resources of the Farmington Resource Area. We are additionally concerned that even Alternative B, the Resource Conservation Alternative, does not provide sufficient protection of the environment in a number of issue areas.

Surface Water Quality - General

The EID is most concerned about the protection of water resources in the Farmington Resource Area. The document states that the Colorado River basin is already experiencing "severe salt problems" due to a variety of natural and man-made causes, and that there are "definite opportunities to reduce contributed salinity levels in the Resource Area" (p. 1-13). The document also states that "Control of erosion, sediment and salt production remains a high-priority management goal" (pg. 1-13) of the agency. Further, the U.S. Department of Interior draft report to Congress on Salinity Control on BLM-Administered Public Lands in the Colorado River Basin (April 1987) declares that salinity control will be actively addressed through the BLM Resource Management Planning process.

There are a number of land management issues addressed by the BLM in this plan which impact the quality of surface water resources in the region. Mineral extraction, grazing, ORV use, and other intensive commodity resource uses have not only individual, but cumulative impacts on the condition of vegetation, the rates of soil erosion, and the subsequent increases in sedimentation of area streams. Both the New Mexico Water Quality Control Commission (1986 305(b) report) and the Environmental Improvement Division (Piatt, 1986) have documented impaired stream uses in the Basin due to overgrazing and mineral extraction.

L272 Overall, however, there is no clear policy outlined in the document which identifies and quantifies both the separate and cumulative impacts of management decisions on surface water quality, and evaluates the costs and benefits of alternative strategies to respond to the problems of serious erosion. We recommend that the impacts of management practices be rated in some relative way for at least the following factors: (1) the amount of soil and vegetative disturbance and erosion caused by the activity in question; (2) the amount of impact of such erosion on the surface water resources in the vicinity; and (3) the management resources necessary to address the erosion, compared to expected improvement in condition. Such a thorough assessment needs to be conducted for all activities in order to truly compare the relative impacts and benefits of each alternative.

L272: The impacts to water resources have been quantified to the extent possible. The specific information you request is normally obtained when specific activity plans are written.

The Draft RMP, as presently written, tends to minimize the water quality impacts of each individual activity type. For example, statements are made such as "negative impacts associated with ORV designation are not significant overall..." (pg. 5-4) and "Impacts of coal mining to water resources would affect less than one percent of the federal surface" (pg. 5-6), and that the benefits of adopting a no grazing alternative are to be "minimal in relation to watershed problems and priorities." (pg. K-1). The impression is given that a continuation of each activity taken alone will not result in long-term significant impact on water resources in the Farmington

Resource Area. Rather, the document states that significant watershed deterioration needs to be demonstrated before remedial management response is warranted in individual management areas for any specific type of activity. At the same time, no such cause and effect relationships are provided for past or existing deteriorated ecological condition.

L273 Water resources management in the Farmington Resource Area should be more than merely reactive, and should draw on the lessons of the past in a preventive approach to water quality protection. The DEIS confirms that such water quality protection can result in important economic consequences for the area, and states that "No economic impacts should result that would be considered significant in the short-term or the long-term unless critical watershed areas are misused and erosion destroys the watershed and contributes to the destruction of downstream water development" (pg. 3-60, emphasis added). Description of adequate monitoring programs, and development and enforcement of Best Management Practices for a variety of activities should be described in the Final Plan.

L274 Some reference is made to the watershed planning activity which is proposed for the area, and we support such efforts to conduct an integrated assessment of what is causing problems, and how best to address them. Reference is made to the modification of existing Allotment Management Plans, when possible, and to the development of separate watershed activity plans for areas already identified as having critical or severe watershed conditions. The document states that the San Juan MFP identified four areas for specific watershed activity planning. In addition, there are two watershed SMA's proposed for the Farmington Resource Area (Farmington Lake and Upper Rio Puerco). [It was not clear in the document if these represent all the watershed plans which will be prepared during the RMP planning period, and what the approximate timetable is for completion. Also, has a thorough inventory been conducted of watershed condition throughout the Farmington Resource Area to determine if additional areas, not yet identified, need to have plans completed, and, if not, will one be done? Will the watershed planning conducted through the Allotment Management Plans result in comprehensive plans which address other issues than grazing in suggesting improved management?]

Ground Water Quality - General

Ground water resources may also be impacted by both mineral activities and other special uses of federal lands such as community landfills. Potential impacts to ground water quality are also described in only vague terms in the Draft RMP/EIS, and in some cases they are ignored altogether. The overall quality of ground water resources in the resource area is not particularly high to begin with, thus any degradation to limited high quality sources must be especially avoided. No comprehensive ground water quality planning effort is proposed for the planning period. We recommend at a minimum, however, that serious attention be paid to the comments below regarding specific management activities and ground water impacts.

Specific Management Activities

L276 Mineral Extraction: The mining of coal has clearly significant impacts on water resources. The State of New Mexico submitted comments concerning the potentially adverse impacts due to coal mining as part of the commenting process on the San Juan River Regional Coal EIS. Surface mining impacts can only be fully assessed on a site-specific basis, but can potentially cause significant disturbance to aquifers and

L273: Monitoring and evaluation is an integral part of the planning process (see page i-5 of this document). The policy and guidance for the management of water resources outlined in Chapter 1 addresses monitoring programs and adherence to Best Management Practices. The specific practices and monitoring methods will be addressed in the activity plans.

L274: The areas you mention represent all the areas for specific watershed activity planning identified to date. Watershed priorities will be ranked based on conditions, impacts, and available funding, and the watershed workload will be completed based on that ranking. The identified workload should be completed during the life of the Resource Management Plan.

L275: The range inventories conducted for the Farmington Resource Area included documentation of watershed condition. Based upon the results of the inventories, the watershed planning needs discussed in the RMP were identified. Watershed planning done in conjunction with AMPs addresses livestock grazing, wildlife, recreation, and other needs as well as watershed.

L276: The mitigation referred to on pages 1-41 and 1-42 of the Draft RMP is for livestock forage. We agree that surface mining could potentially affect acquirers and recharge areas and that the impacts would be essentially permanent.

recharge areas. These impacts are essentially permanent in nature. In all cases regarding mineral activity, the Draft RMP asserts that such negative impacts will be "mitigated by reclamation" (pp. 1-41, 1-42), but past experience has shown that, in fact, coal mining activity has resulted in increased salinity in the Colorado River Basin (U.S. DOI, April, 1987).

Oil and gas operations also have potentially adverse impacts to water quality, especially to ground water resources. BLM should be especially concerned about adherence to stipulations regarding the disposal of produced waters from the approximately 20,000 existing oil and gas wells in the Farmington Resource Area, as outlined in a Notice to federal oil and gas lessees issued by the U.S.G.S. in 1978. This concern is additionally expressed in the RMP both on page 2-3, which states that BLM will "ensure compliance with lease terms and conditions and stipulations on exploration", and again in Appendix A as a current management decision for watershed management in the San Juan MFP that "Ensure(s) that proper disposal of toxic waste from oil and gas wells is accomplished." (pg. A-3). We question what BLM's experience has been in the past regarding compliance by oil and gas lessees with existing environmental stipulations, and what plans the agency has to correct any problems that may have been experienced. Further discussion of this is found below in the section on landfill management.

Road construction is an additional potentially significant area of impact associated with mining activity. The document makes only vague reference to plans regarding road construction, maintenance and closure. Further information should be provided, for example, on how many miles of new road construction are estimated per year in the planning period, who will pay for construction, and how many miles per year of road are slated for partial or total closure? What level of maintenance, on how many miles of road, are planned per year? If roads are constructed for mining or other lessee purposes, who is responsible for maintenance of the roads during the lease period? Is the area of transportation/road construction subject to preparation of an overall Resource Area-wide activity plan, or will transportation be addressed only on a case-by-case basis?

Finally, we have some technical comments to make regarding coal mining statements in the document. On page 1-43 and 1-44, both the Preferred Alternative and Alternative C indicate that mining will take place on a maximum of 2.3% of federal lands in the Farmington Resource Area, while stating that long-term impacts due to mining will occur on "less than one percent of the soils". The Resource Conservation Alternative, on the other hand, has a maximum of 2% of lands open to mining but will incur "long-term impacts to about 2 percent of soils" (pg. 1-43, emphasis added). This is later contradicted by a statement on page 1-44, where such impacts are stated to occur on less than 1% of the soils. These passages, and other similar references which may appear throughout the document, should be clarified and made consistent. Also, there is a statement made in the Hydrology section of Alternative A on page 3-11, which states the "Potential impacts to surface water resources are not as important impacts to ground water resources." This statement appears to refer to coal mining, but may refer to water resource impacts in general. Please clarify this.

Grazing: Present rangeland condition in the Farmington Resource Area contains a majority of lands in poor and fair ecological condition. The document confirms that the deteriorated condition of much of the area's rangeland is due at least in part to over-grazing, and contributes to water quality problems in the area. In fact, existing watershed evaluations dating from the 1970's do recommend some emphasis on

L277: Adherence to environmental stipulations varies between companies with the majority making a good faith effort to comply. Whenever incidents of noncompliance are located existing regulations and policies dictate penalties and procedures for dealing with such situations.

L278: Roads constructed for mining are site specific projects which are analyzed at the activity planning or mine planning stage. As it is unknown which, if any, coal tracts might be leased, any attempt to estimate the effects of hypothetical road construction would be meaningless at this time. Roads for other purposes are built and maintained by the holder of the individual right-of-way. The BLM grants ROWs with appropriate stipulations on a case-by-case basis. As the vast majority of roads in the FRA provide access to oil and gas wells the demand for ROWs varies from year to year and cannot be reliably predicted. The BLM is not allowed to prohibit access to existing oil and gas leases if such a prohibition would preclude economic development of the lease. We are presently working with oil and gas companies in an attempt to develop a road construction and maintenance policy for the Resource Area.

L279: The text on page 1-43 should have read "long-term impacts to less than one percent of soils..." This statement, and a duplicate of it on page 3-24 have been corrected. The other figures which you comment on are correct as stated.

L280: The statement refers to the impacts to water resources as a result of surface mining.

grazing management in place of watershed stabilization projects to control erosion (pg. 2-10). We support the concepts of AUM reduction, structural range improvements and monitoring programs in an effort to stabilize and improve range condition. The reference to the development of watershed management as a part of the revision of Allotment Management Plans is also a positive step, although more information is needed to evaluate the adequacy of the proposed effort.

L281 We do have some questions about how AUM adjustments and other grazing management decisions will actually be made. Normally, the condition of range improves very slowly after remedial action, and the impacts of management decisions are not fully understood for many years. The document states that "Allotment categories will be periodically evaluated during the five-year monitoring program, to determine if the allotment characteristics have changed significantly enough to warrant a change in categories" (pg. J-2) and that "M and I category allotments will be monitored through the use of rangeland studies designed to detect changes in range condition and trend", with results analyzed at two year intervals for I allotments, and five year intervals for M category allotments. We question whether a five year vegetative monitoring program is sufficient to provide the information necessary to make sound decisions on AUM adjustments, and other grazing management. In addition, it is not stated exactly what this monitoring program would entail, or how the link will be made between specific activities and measurable change in condition, especially when a variety of activities ongoing on a particular parcel of land. We recommend that BLM take a management approach which takes this slow improvement rate into consideration, and does not proposed increased stocking rates on any lands currently in fair or poor condition during this planning period. At the very least BLM should extend its plans for monitoring throughout the planning period, preferably into multiple decades, and conduct monitoring in close conjunction with the watershed plans to be developed during this period.

L282 There are also a number of very confusing statistics cited throughout the document which make it extremely unclear as to what impact grazing is having on the ecological condition of the land. On page 3-24, for example, in the description of Alternative B, it is stated that there will be an 11% decrease in "poor" acres, but that 49,998 acres would remain in poor condition (12%). At the same time, there would be an increase of 4,887 acres in good ecological condition (9%). What do these percentages mean? Are they percentage changes, or percentages of total acres, or some other measurement? There should be a table somewhere in the document, which shows all the gross acreage numbers, by alternative, for each range condition. This table could also indicate the percentage of the total acres, by alternative, for each condition compared to the present status. As currently described, it is impossible to clearly follow and compare what the impacts of each alternative will be.

L283 We also have a major question regarding the overall description of grazing management as indicated by the diagrams on pages 3-22 (Alternative B), 3-36 (Alternative C), and 3-50 (Alternative D). These charts show that Alternative C (the Resource Production alternative) produces much more beneficial long-term changes in ecological condition than Alternative B, the supposed Resource Conservation approach. Alternative D produces an even bigger benefit than Alternative C. If this assessment is correct, i.e., that an increase in AUM's actually improves range condition, some explanation for such dramatic improvement must be provided in the RMP. Presumably, the improved condition occurs at least in part as a result of different grazing practices and structural improvements and investments made on

L281: The five-year monitoring program referenced is a program for evaluating the effectiveness of changes in grazing management and aiding in the determination of livestock grazing capacities. Once the determination of needed livestock grazing use adjustments has been made, further monitoring of vegetative and watershed conditions will continue to provide information necessary to respond to possible changes in resource demands and conditions.

L282: The figures you refer to are percentages of total acres; however, the 11 percent figure was incorrect and has been changed to 12 percent. We chose to graphically depict the relationship of the estimated changes in ecological class changes versus present conditions; these are shown in Figures 3-2, 3-3, and 3-5.

L283: The analysis you give for the differences in ecological condition between alternatives is correct. We believe that the discussion of impacts and anticipated results for each alternative provide adequate information for the reader to make the same conclusions you did.

While a "no grazing" alternative was considered, an "enhancement of ecological conditions" alternative was not. While the Resource Conservation alternative was proposed to enhance resources, the alternative theme does not apply strictly to improved ecological conditions.

the land. One might then conclude that the reason for lesser range condition improvement in Alternative B is that, while AUM's are reduced, no other remediation measures are taken to improve the land. This cause and effect relationship between grazing management and range condition for various alternatives must be much more clearly explained in the document. A resource conservation approach also should be developed, which provides for active remediation in addition to reduced AUM's. This alternative should clearly live up to the statement in the document that increased vegetative production "would be reserved for improved watershed condition and enhancement of wildlife habitat" (pg. 1-41), and provide significantly greater long-term improvement in ecological condition of the land than Alternatives C or D.

ORV Use: ORV use is essentially unrestricted in all alternatives offered. A true "Resource Conservation" approach should more appropriately give clear priority to soil and water conservation and other amenity values by restricting ORV use throughout most of the Resource Area, and allowing open or limited use only when there is a demonstrated significant demand. The present alternative assumes a passive approach to management of ORV's, which is only partially amended in favor of conservation concerns. [The BLM's own statements indicate that the impacts of use restriction on the ORV community would be minimal since "The soil types, terrain, distance from major population centers and the lack of convenience facilities in the Farmington Resource Area are not conducive to attracting widespread ORV recreational use." (pg. 3-3) We believe that no "irretrievable and irreversible" soil loss should be tolerated for such a limited demand activity.

The document also states that "Overall, with the exception of localized areas, impacts of off-the-road vehicle travel have not been documented on public lands" (pg. 3-10). Although no strong documentation is given in the Plan regarding the relationship between ORV use in the Farmington Resource Area and the development of soil disturbance and erosion, enough statements are made which alert us to the inherently disruptive and destructive nature of ORV use (and in particular OHV use) on soil and water resources. [For example, in the description of impacts of even the Resource Conservation alternative it is stated that "For lands designated "open", damage to soils could occur...Gullying and wind erosion would increase where vegetative cover is reduced. Where loss of soil occurs, the changes are considered irretrievable and irreversible." (p. 3-24). Impacts would also "include possible increases in runoff rates and sediment and salt discharges in localized areas." On the 79% of the total lands left open in the Resource Conservation Alternative, then, (as opposed to 91% designated open in the Preferred Alternative D) the soil and water resources are thus ranked as secondary to demands for motorized recreation. Passive and reactive management is the approach favored in a plan which states that, "emergency closures can be initiated where potential damage is shown to be significant" (after the fact), even when damage is admitted to be "irretrievable and irreversible".

The document also does not recognize that the location of ORV activity is a much more important factor in assessing potential water quality impacts of ORV use than just the total number of acres of exposed land. Statements in the document are thus misleading when they state that ORV impacts are "mostly confined to localized areas adjacent to population areas" (pg. 3-3) and "Since there is little evidence of off-the-road vehicular travel on public land away from population centers, the overall impacts of the "open" designation would not be significant" (pg. 3-54). Water quality impacts are usually a function of where the degradation is occurring in relation to surface water, not population centers per se. In fact, most population

L284: Comment noted.

L285: Emergency closures can be initiated where damage to the soils resource, or the potential for damage, is shown to be significant. This action should minimize soil losses resulting from ORV use.

L286: The document is correct in the statement concerning the lack of documentation reporting impacts from ORV use. This is considered part of the existing situation.

L287: The statements quoted from the Draft signify potential effects should ORV use increase in the future. The words "could" and "possible" point to potential not actual effects. ORV activity is not expected to increase markedly in the Farmington Resource Area during the life of this plan.

L288: The proposed ORV designations are based on locales that have undergone actual impacts or are viewed as having a realistic potential for future impacts. The current situation is such that locales near population centers have the greatest potential for impacts caused by ORV activity. These areas have been identified as SMAs for intensive management and monitoring of the activity to protect water quality. In effect, the designations are proposed to protect and prevent areas from degradation and intensive ORV activity near population centers as a function of the current situation.

L289 centers are located on or near surface water courses, so that these "limited" areas of use are also probably the most sensitive of locations regarding water quality. The three SMA's proposed for ORV recreation use, for example, although directing use and meeting the demand for a certain type of recreational use, may also present serious environmental impacts to the San Juan River. Both the Dunes ORV Play Area and the Head Canyon ORV Competition Area are located within 1-3 miles of the San Juan River; the plan states that these areas could have "accelerated rates of erosion and sediment yield", and that these impacts are "irretrievable and irreversible". These areas should either be relocated, or include extensive preventive and mitigation provisions, including a monitoring program to document that erosion is not increased due to this activity.

L290 Further, other statements meant to minimize concern over ORV impacts in fact raise serious questions about allowing their use at all in certain areas, such as riparian zones. The document contains such statements as "...except for some river tracts, there is little evidence of off-the-road vehicular traffic on most of the SMA's designated for wildlife". We believe that ORV use should never be allowed in riparian areas, for it is there that they inflict some of the most serious damage to soils and water. As the purpose of the proposed River Tracts SMA, which allows "limited" ORV use, is to "protect and rehabilitate the riparian and wetland habitats and, when compatible with wildlife, provide river access and recreation sites for the public", no OHV use should be allowed at all, and ORV use should be restricted even on maintained unpaved roads during wet periods. Stringent enforcement must also be ensured, and if violations consistently occur, the area should receive a closed designation.

L291 The presently highly skewed nature of the recreation opportunities in the Farmington Resource Area in favor of motorized recreation gives further support to the need for a stronger conservation approach, which restricts the overwhelming use of ORV's on these lands. Of all the lands available in the Resource Area, only 1.7% offer primitive, non-motorized type experiences, located primarily in wilderness areas. For a balanced multiple use Alternative, this is clearly out of proportion to the demand for a variety of Recreation Opportunities, and highly weighted in favor of motorized recreation, at the expense of other resources.

The Resource Conservation Alternative should include at least the following provisions regarding ORV use:

(1) the majority of lands should be designated closed or limited, with some areas set aside specifically designated for intensive ORV use. All designations should be made with the location of surface water resources as well as soil condition and type in mind.

L292 (2) a pilot research project should be initiated as part of the mandated watershed monitoring plan requirements, to begin documentation of the actual impacts associated with both ORV and OHV use, so that management can be fine-tuned according to real, observed locational impacts.

(3) Management on "open" and "limited" use land should be marked by prevention, such that active implementation of restorative and mitigative measures in high-use areas, as well as areas where degradation is advanced, is ensured. Non-paved road maintenance should be conducted aggressively, and seasonal restrictions and/or road closures must be diligently enforced.

L289: The designation of these SMA's were not assessed as creating serious environmental impacts. If not managed properly, ORV effects could result in resource impacts. Again the assessment of impacts is in terms of potential effects not actual. Refer to the Implementation of ORV Designations Appendix for monitoring and impact mitigation plans.

L290: The management prescription of "limited" for the River Tracts SMA has been clarified to indicate that vehicles are to be restricted to designated roads and trails. This designation was used as some tracts have oil and gas wells to which BLM is required to allow access.

L291: The semi-primitive recreation opportunities provided by the Bureau are commensurate with public demand in the region.

L292: These provisions are noted. The first provision for blanket restrictions is incompatible with Bureau policy where resource damage is not a problem. The second provision is part of the implementation of ORV designations. The third provision is either part of the Proposed RMP Issue No. 5 or continuing management guidance. See also response L278.

Landfills : The issue of landfill management is among our highest priority concerns in the protection of ground water resources in the Farmington Resource Area. We found the very brief mention of Recreation and Public Purposes leasing policy regarding landfills totally deficient in the Draft RMP/EIS. This omission is especially surprising since BLM has been quite active recently in developing policy regarding the management of such landfills on BLM property. The document states on page 2-7 that a number of Recreation and Public Purposes leases and patents have been issued by the BLM, including some for community landfill uses. The document goes on to state that "This type of case work, plus an increasing request for land sales will continue to grow as more land around the communities is developed."

L293 In the Farmington Resource Area, specifically, the incident at the Lee Acres landfill in 1985 was a vivid example of the serious environmental issues which can potentially arise in the leasing of federal land for use as public landfills. Statewide BLM policy, which followed shortly thereafter, called for a cessation of lease granting for the purpose of landfills in order to avoid liability problems associated with the illegal disposal of toxic and hazardous waste. This marked policy shift is not at all reflected in the R & PP section of the Plan, nor is any analysis done regarding the history of BLM landfill policy, the development of recent changes in policy, or any proposed further changes in management approach on either remaining leases, or regarding outright sales of land for landfills. There may be significant social and economic impacts on local communities as a result of such policy, which should be addressed in the Plan and EIS document.

L294 The environmental impacts of landfills on BLM lands are also virtually ignored in the document. Even if the BLM opts to sell lands for landfill uses, and therefore bypass any direct costs of environmental damage on new landfill properties, the adverse environmental impacts of another hazardous waste incident may very well cross over property lines and impact underground water resources on remaining BLM lands. The RMP should document in general the past environmental impacts of landfill use on BLM lands in the Farmington Resource Area, and what steps have been taken to address any degradation which has occurred.

L295 The State Environmental Improvement Division has worked extensively with the BLM to resolve the Lee Acres contamination problem and recently has recommitted to cooperate with BLM personnel in monitoring and identifying problems with unauthorized disposal of toxic and hazardous wastes in landfills. At the same time, the public should be made clearly aware of agency plans in this important management area by means of the Draft RMP and EIS.

L296 **Budget**: Clearly all the management issues outlined in the draft RMP are closely tied to the subject of BLM's budget-making process. Nowhere in the document was there any effort made to give even a relative indication of what level of resources was intended to be allocated to various management activities. Without such estimates, particularly as they relate to historical spending patterns in the Farmington Resource Area, it is difficult to truly evaluate priorities and assess the intensity of activity among management alternatives. In addition, in the not improbable case of federal budget reductions, which do not grant the Farmington Resource Area the amount requested to implement the final approved alternative, no guidelines are articulated to indicate the manner by which the plan will be scaled down to meet budget constraints. Since the timeliness of certain actions are crucial to their effectiveness, and the importance of conducting all management activities is not equal, a clear process of restructuring priorities in the event of budget reductions of various amounts needs to be developed by the BLM and presented in

L293: There has been a change in BLM policy. No additional R&PP leases will be issued for landfill purposes. Existing leases will be extended on a year to year basis until the site is fully utilized. The Farmington Resource Area has no control over this policy. Public land can still be purchased for landfill purposes, so there should be no great social or economic impact.

L294: Known or expected environmental impacts of landfills were addressed in environmental assessments prepared for landfill leases issued after 1989. The extent of impacts from illegal hazardous waste dumping are not currently known and are not restricted to public land.

L295: Public entities involved in landfill operations on public land are well informed of the Bureau's policy on landfills.

L296: Land-use planning is not based on budget but rather on public lands and resource values. However, the planning process considers the budget realities in formulating a reasonable set of alternatives. Congressional additions frequently alter BLM budget requests. Attempts to predict how Congress will act in the future are beyond the scope of the RMP. The BLM is required to follow all laws and regulations affecting both resource production and resource protection, regardless of budget allocations. The Bureau's multiple-use mandate most often results in a balanced approach to land management for both production- and conservation-oriented programs. Where conflicts exist between these approaches, they are resolved based on the public interest. In all cases the principle of avoiding undue and unnecessary degradation is observed.

the RMP. Under all conditions, certain minimum levels of resource protection should take precedence over all resource production activities, so that the long-term preservation of the resource is ensured above all. Such a process must be expressed clearly to the public so that the BLM can be held accountable for its activities under all budget scenarios.

cc: Maxine Goad, GWHW
Dave Tomko, Dis. 2
Kathy Sisneros, SWQ



NEW MEXICO NATURAL RESOURCES DEPARTMENT

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DR. THOMAS G. BAHR
Cabinet Secretary
Natural Resources

William L. Chapel
State Forester

July 2, 1987

44

Mr. Ron Fellows, Area Manager
Bureau of Land Management
Farmington Resource Area
Caller Service 4104
Farmington, New Mexico 87499-4104

Dear Mr. Fellows:

This letter is to transmit the recommendations of the Energy, Minerals and Natural Resources Department regarding the 1987 Draft Farmington Resource Management Plan and Environmental Impact Statement. Our overall position is that the Farmington Resource Area Staff did an adequate job of presenting the issues and describing the management alternatives.

We thank you for the opportunity to offer our recommendations for this plan.

Sincerely,

Thomas G. Bahr
Secretary

TB:GF:ag

July 2, 1987

Energy, Minerals and Natural Resources Department
Forestry Division
Room 129 Villagra Building
Santa Fe, New Mexico 87504-2167

Review of the 1987 Draft Farmington Resource Management Plan and
Environmental Impact Statement.

The Forestry Division offers the following recommendations for the Farmington Resource Management Plan with a basic understanding of the awareness, concern and commitment that goes into the process of developing a plan of this magnitude. It is hoped that changes adopted as the result of our recommendations will be beneficial in identifying your agencies intent and to remove those technical inconsistencies that were identified.

Page 2-18 Threatened or Endangered Species

L297

We recommend that Table 2-1 remove the Group 1, 2 and 3 nomenclature for the plants identified. The States law related to this provides legal recognition and protection from unauthorized collection only for endangered species. Thus we propose that Table 2-1 be modified as follows:

L297: Recommended change accepted.

Table 2-1 (continued).

<u>SPECIES</u>	<u>CATEGORY</u>
Knowlton's Cactus	Federal Endangered State Endangered
Mesa Verde Cactus	Federal Threatened State Endangered
Mancos Milk-Yetch	Federal Endangered State Endangered
Zuni Fleabane	Federal Threatened State Endangered
Grana Grass Cactus	Federal Category 2 candidate State Endangered
Aztec Gillia	Federal Category 2 candidate State Endangered
Succulent Dwarf Salt Bush	Federal Category 2 candidate State Endangered
Whipples Cactus	Federal Category 2 candidate State Endangered
Checker Lily	State Endangered
Wrights Fish-hook Cactus	State Endangered

L298 On the following page (2-19) the Energy, Minerals & Natural Resources Department would prefer that the reference to the New Mexico Heritage Program be updated to the official title the State of New Mexico's Resource Survey Program. We have identified several other places in the plan with the Heritage Program reference and have noted them with "update program title".

L298: Recommended change accepted.

L299 Page 60 The Houback ACEC
We recommend that the references to our agency be updated.

L299: Recommended change accepted.

L300 The quote that this area is one of the two top locations in the State for rare plants is accurate and is due in part to the fact that it is the southeastern extension of the Colorado Plateau flora. Also, we recommend that a study plot for recovery of *Astragalus humilimus* be considered using techniques described in the federal recovery plan.

L300: A study plot for *Astragalus humilimus* was established in 1987. Modification of study techniques will be incorporated if necessary based on your recommendation.

L301 Page 62 Reese Canyon RNA
We recommend that the references to our agency be updated.

L301: Recommended change accepted.

L302 Page 64 Aztec Gilia Habitat
We propose the following language for the second paragraph of the General Description.

L302: Recommended change accepted.

The presently known potential habitat of this species consists of badland areas east of Aztec and Bloomfield, New Mexico. The only known habitat for Aztec Gilia is in the Farmington Resource Area. Approximately 15% of the potential habitat has been intensively inventoried. Botanists with the State of New Mexico Resource Survey Program have identified approximately 125,400 acres of public lands as high potential habitat for Aztec Gilia, of which approximately 11% is actually occupied by the species. The special management area will consist of those portions of the potential habitat which contain viable populations of this species. Two portions of the habitat (approximately 6,400 acres) have been nominated as an ACEC. These areas were selected because they are of sufficient size to maintain a viable genetic population base and between them, they express most of the genetic variability within the species. Botanists with the State of New Mexico's Resource Survey Program believe that the designation of the ACEC will relieve ORV pressure on sufficient habitat to avert and prevent progression of listing activities by the U.S. Fish and Wildlife Service. Approximately 80% of the total population is presently threatened by ORV damage.

Pertinent Portions of Transcript from Public Hearing at Crownpoint, New Mexico, May 5, 1987:

Thomas Begay:

T1: We understand that you, the Bureau of Indian -- or Bureau of Land Management propose to sell or put on some restriction on these public lands. There is no provision for us Navajo people presently living on the land mentioned. My family and I oppose any changes that would affect our livelihood.

T1: See comment response L93.

T2: My family and I would like to request a first preference in obtaining clear title to the land we are presently living on and for the generation as a gift to our family or make it a Tribal land....

T2: See comment response L93.

T3: I and my family pay for the use of the land and, to this date, they never have had any water development, nor any kind of projects on this land. This, we feel, is a fraud, waste and abuse on the part of whoever gets the money that we pay year to year for the use of the land. We, therefore, demand that some portion of the money be returned to this mentioned land for improvement.

T3: See response L94.

Nonabah Begay:

T4: Therefore, I'm pleading with you to give us freedom to live in peace and grant us a clear title of this land, which is Southeast 1/4 Section of 19, Township North, Range 19 West, New Mexico P.M.

T4: See comment response L93.

Rosemarl Knok:

T5: On April the 23rd, 1987, the Area Director, Mr. Wilson Barber, Jr., submitted written testimony to Mr. Ron Fellows, the Area Manager on the Farmington Resource Management Plan and the Environmental Impact Statement. At this point, we would like to request that the letter and all the exhibits that were submitted at that time be written and submitted for the record.

T5: The letter referenced contains comments L25 to L44.

T6: BLM, I'm sure, is aware that, historically, resource planning alternatives that affect the Indians, the Navajo Indians using public withdrawn lands requires three elements simultaneously; and that's public policy, humanity and justice.

T6: See response L28.

T7: The Navajo area is supportive of BLM's alternative D, the preferred alternative, provided that the Navajo area comments and recommendations are not only considered, but also implemented.

T7: Comment noted.

T8: The Navajo area prefers to work with BLM and the Navajo Tribe through cooperative agreements regarding land use planning in the area considered.

T8: Comment noted.

T9: The study shows that there are certain sacred places, such as Eagle Hatching Mesa, as being considered as a possible sacred place by the Resource Plan. And the concerns of the Indians are that places such as these that are known as sacred places be fully considered, rather than as being considered as a maybe.

T9: See response L33.

Jerry DeGroot:

T10: Upon viewing the maps that are enclosed in the RMP, we assume that these are tools that will be used to evaluate the program, we noted that the coloration of the land status within this map was in error. Particularly south of Gallup, as you'll notice in the back there, they got a map that's enclosed into the RMP. This is a copy of it. As you'll notice, there's a rather large area of yellow in here. According to our records, all of those are supposed to be Tribal trust lands. These are lands that were turned back over to the Tribe as part of a Congressional Act and recall were called submarginal lands. So I went ahead and recolored the areas that I thought were in error, and this is the way it looks. As you notice, all of the yellow is gone south of Gallup. A large area of white, another land status area, are now Tribal land. And we think that the map should be revised to reflect the true colors so that a person that's not familiar with the land status within the area can look at this map and evaluate it and evaluate the program. We also recolored some of the lands that we considered to be under BIA administration, which is the executive order lands and PLO lands. Those are in the darker orange color here. So by doing this, you'll notice that it pushes the majority of public lands back up into the Nageezi or Torreon area.

T10: See response L35.

Rosemarl Knold:

T11: Continuing on, the RMP should state that the RMP's only for public lands that does not affect Indian lands.

T11: See response L36.

T12: Alternative C, the conservation alternative, and alternative D, the preferred alternative, proposed reducing available AM use by almost \$26,000 or more than 43 percent. These actions would have profound economic effects on hundreds of Navajo stock growers who already survive at subsistence levels. No proposal for mitigating these impacts at submarginal levels. No proposals for mitigating these impacts are discussed in the document, nor does the RMP address the effects of coal development on existing grazing allotments; their improvements, fences, water and so forth.

T12: Please see the response to comment L41.

T13: The Environmental Impact Statement does not discuss the increased need for water and potential decreases in quantity and quality of possible contaminations from mining activities. Nor does it cover impacts on water supplies from reclamation activities. It discusses the high population from the surrounding communities, but does not discuss the effects the population increase will have on the water resources.

T13: These are site specific impacts that will be assessed during activity planning.

John Stedd:

T14: As I indicated, the goal of my clients is to preserve their use of public lands and to prevent inconsistent uses of adjacent public lands. It is, in a real sense, a selfish goal, but it is no more selfish than the goal, for example, of an energy company that wants to use those lands or the BLM itself, which, without those lands, really hasn't much work to do. The advantage of this selfish view, the strength to it, is that the Navajo view is backed by history, and it's backed up by the facts, the principal fact being that this is Navajo land. It is something with which the Resource Management Plan acknowledges indirectly. It acknowledges it by saying, "We intend to pull out of the southwestern portion of the Farmington Resource Area," but it does not emphasize sufficiently. I think it is imperative for a decision-maker, in reviewing this plan, to have clearly and explicitly laid out before them the utter dominance and the virtually exclusive Navajo use of the bulk of the Eastern Navajo Agency. Without that perspective, I think it would be very difficult for a resource manager implementing this plan to make the proper decisions.

T14: See comment response L93.

T15: As I said, this is not BLM land. It may be BLM land legally, it may not be. Although some of the claims of the Tribe to that land may be barred by the passage of time, individuals have claims upon that land which are not so barred. More importantly, it is historically and factually Navajo land. They have been here since long before we came. They have fought for it for several hundred years. They still have it and I hope they will always retain it.

T15: See comment response L93.

T16: I think it's important that the BLM recognize that the Federal Land Policy and Management Act does not require them to stick solely with legal technologies. Obviously, the legal rules must be considered. But FLPMA permits and, indeed, mandates consideration of the broad public interests. And I think within that bureau, we see considerably more concern for Navajo land users than is present in this plan.

T16: Comment noted.

T17: This plan should state an explicit and perhaps exclusive preference for disposal of public lands in the southwest portion of the Resource Area to either individual Navajo people or to the Navajo Tribe.

T18: In implementing land exchanges, land consolidation, it is crucial that the BLM work closely with the BIA and with the Navajo Tribe. Again, there is some minimal recognition of that in the plan action. It is not sufficiently clear. I do not recall seeing a reference to the BLM's -- I mean to the Bureau's and to the Tribe's ongoing land consolidation plans.

T19: I'm quite concerned that the BLM, the Tribe, and the BIA are moving on separate tracts; and that unless there is, in this document, an explicit commitment to work closely with them, there is no guarantee that the land consolidation and exchange plans of any of those agencies will be consistent with each other. I believe that's consistency which is required by FLPMA, although those land consolidations are not improved.

T20: The plan does not adequately address the primary question of Navajo occupants of the public domain. Again, as was mentioned previously, the sole mention of the Navajo Resolution Program is in a couple of paragraphs in the Continuing Management Guidance Section. Those paragraphs are ambiguous. They state that the goal of the program is either to eliminate Navajo occupants or to authorize them. Frankly, I don't see why the BLM says that. I know of the history of this plan. Its principal goal has been to authorize those uses. I think it's simply a political matter that would pay for you gentlemen to make that express in there.

T21: I think it's also important that some of the criteria for authorizing occupancies, the nature of title, if any, to be given to the occupants be specified in the plan.

T22: The plan does not propose disposal of BLM subsurface rights, despite the authorization from the Federal Land Policy for such disposals where the mineral ownership, and the switch by the United States interferes with appropriate non-mineral development. I think this is excellent authority for the disposing of the mineral rights to the people who have been there for hundreds and hundreds of years.

T17: See response L92.

T18: A statement to this effect has been added to the Proposed RMP.

T19: The RMP has a built-in mechanism to ensure compatibility with other land-use plans. Refer to Chapter 4 of the Draft, page 4-2.

T20: It is the Bureau's goal to authorize, if possible, every existing unauthorized occupancy. Resolution of these unauthorized uses could be by exchange, sale, lease, or other possible means. These actions would eliminate the unauthorized status of a homestead.

Relocation would only be considered when it was determined that the public lands are needed for resource development that is inconsistent with residential use. Relocation is not considered in this RMP.

T21: See comment response T2-20 for a list of the possible means for resolving unauthorized occupancies.

T22: Federal mineral ownership does not by itself interfere with "appropriate non-mineral development." FLPMA requires mineral retention in most cases. An exception might be made when the surface owner applies for the subsurface minerals under a specific tract on which he intends to place an expensive structure, such as a hospital. In such a case, when it would not be economically feasible to require that the surface owner or a lessee relocate the structure, the underlying minerals may be disposed of to the surface owner.

T23: The plan does not specify or permit adequate protection of privacy of Navajo people with regard to sacred sites. You do refer to your goal of obtaining a cooperative agreement to help identify and protect these sites. I think you should really concentrate on that. You should not insist that Navajo people come to you and specify the exact location and the exact use of the sites which are very, very private. Some sort of arrangement must be worked out where they can go to people they trust, to Navajo people, be they the local medicine man, Tribal representatives or whatever, and that BLM will accept the good faith word of those Navajo people that this land has an important use, so the Navajo people don't have to disclose to you or to me or anyone else exactly what those lands are used for.

T24: I don't believe this plan has been adequately presented to the public; that there has been adequate public participation. I know there is significant contacts with the Tribe in its preparations, significant contacts with the BIA, significant contacts with local Navajo governments. But when the final draft -- when the draft actually came out, I have discovered that enormous numbers of people have no idea that it is out. I don't speak Navajo, although I listen to the radio stations. I did not hear you gentlemen with an advertisement on there telling people about these hearings and about the plan. I think something like that in the future is crucial to reaching an audience which, as you well know, is largely Navajo speaking and largely does not read. They certainly don't read the Federal Register, which is where I found out about it.

T25: There was no public hearing held in the Gallup area. Despite the transfer of the large amount of BLM land in that area, there are many thousands of acres of BLM land remaining south of Gallup. There's substantial LGLN mineral interests south of Gallup, and I believe those people deserve an opportunity to have a hearing closer to their home so that they would not have to travel so far this time of year when they're busy shearing, when they've got young lambs to take care of, et cetera.

T26: In conclusion, I want to make a statement that may be somewhat strong, perhaps a bit overboard, but it accurately reflects the sentiments of the people I have spoken with about this plan. The United States has been, in a very real sense, practicing cultural torture of the Navajo people. For the past 20 years, the United States has been coming out here with constant proposals, saying, "We're the United States Government. We're the BLM. By the way, we own your land. We're sworn by reclamation to protect your occupancy of that land, but we're not going to do it. We want your input. Do you want us to take your land away? Do you want us to control your lands and your way of life?" And every time, the Navajo people say no; and every time, another proposal surfaces a few years later. And I think this is slowly grinding down the resistance of the Navajo people; people who, for 300 years, have fought for and kept their land.

T23: Navajo informants are reluctant to provide location information on sacred sites. Therefore, it is difficult to identify them for management attention and thus protective measures.

T24: Chapter 4, the Public Involvement section gives specific information on public participation such as when the Draft was released, the Federal Register Notice of March 2, 1987, and various news releases that were sent out. In addition, a number of meetings were held with various Navajo leaders (or Chapters) to make the public, and especially the Navajos, aware of the plan.

T25: Grants, NM is centrally located in the southern portion of the resource area conveniently located along Interstate 40 for those interested in participating at public hearing. It was selected as the hearing location based on past interest and the number of people who have attended and spoken at both Grants and Gallup. Interest at Gallup has not been high in the past and it was decided that those who were really interested would be willing to travel to Grants.

T26: Comment noted.

T27: Second, you have admitted your inability to manage the lands in the southwest portion of the Resource Area. All you need to do is go one step further, express a preference for turning those lands over to the Navajo Tribe or the Navajo people, state plainly that you will use all your existing authority, not merely FLPMA, but every authority available at your disposal, and that you will actively work with the Navajo people to seek additional Congressional authority, if need be, to get that land to the people who have always used it, and I hope will always use it.

Diana Calais:

T28: And I'd like to focus on the changes that the RMP proposes with respect to grazing animals. These proposed grazing management changes do not take into account the economic and social consequences for the Navajo people who live on this land.

T29: With respect to strip mining, certain tracts of land have been proposed for strip mining. If land is used for strip mining, it obviously will not be available for grazing for a number of years. The RMP does not address the question of what will happen to people who are using this land. Will there be alternative grazing areas available for them to use during the approximately 20 years that the land won't be usable for grazing? Also, will there be any compensation for stock owners who are no longer allowed to use this land during the strip mining period.

T30: Also, reclamation of the land has been proposed after strip mining. And I wonder whether the land will every really be suitable for grazing again. I understand that no land area in the United States has ever been strip mined and then officially declared to be once again suitable for grazing. The strip mining causes a long-term and possibly permanent loss of grazing land, and yet the RMP makes no provision to compensate people who are currently using this land for grazing or to provide alternative grazing areas during this period.

T31: With respect to range land improvements, again, it's proposed that certain lands need improvement and that they would be improved by various methods. Again, this land, while it's being improved, won't be available for grazing use. So once again, what compensation will be given to people who are making their livelihood off of this land or what alternative grazing areas will be available for them to use so that they can continue to survive economically while these improvements are being made?

T27: This is the direction the RMP takes. See response L180.

T28: Economic and social consequences were addressed for each RMP alternative in the Environmental Consequences chapter (Chapter 3) of the draft RMP, under the subheading of "Social and Economic Conditions."

T29: See Introduction.

T30: See responses L41 and L43.

T31: See response L91.

T32: Also I have some questions concerning some of the proposed methods of range land improvement in Appendix M. Some of these methods appear to have potential undesirable effects. One of the methods proposed was plowing lands and then seeding them with desirable species of grass. I wonder if this is a wise plan in an arid land such as are in the Farmington Resource Area. In the late 19th century, the great plains in Kansas and Oklahoma were planted there. And in the 1930's, there was a dust bowl in Kansas and Oklahoma, and people had to leave because they could no longer make a living off that land. And I wonder, if this is done here, would there be another dust bowl? The other method I'd like to question is the use of herbicides and other chemicals. The one proposed was called Tebuthiuron, I believe that's how it's pronounced. Are these chemicals really safe? What are their long-term effects on animals and human beings? Could they possibly get in the water supply? I don't think that question is really addressed in the plan.

T32: See response 16-2.

T33: Finally, with respect to sale or exchange of BLM lands, again, what will happen to people who make a living grazing animals on this land? Will they still be permitted to graze their animals after the land is sold or exchanged? Will there be alternative grazing areas provided for them if they can't use the land that they're currently using? Will any provision be made to affect them -- to mitigate the adverse economic and social effects on people who are currently grazing on these lands?

T33: Due to private party agreements, loss of grazing privileges does not typically occur when lands are exchanged or sold. If the lands are offered for exchange to other land management agencies, the impacts would be mitigated if these agencies continued to grant livestock grazing use to the allottees. If lands are offered for competitive sale, affected allottees would have the option of purchasing the public land in their allotments.

The above wording is found in the analysis of impacts in Alternative D and similar wording is found in Alternatives B and C of the draft RMP.

Roselyn Dooley-John:

T34: Now, therefore, be it resolved that, number one, the Chichiltah Chapter hereby strongly oppose the proposed plans of the Secretary of the Interior and the Bureau of Land Management to conduct any activities on Bureau of Land Management lands that are presently being leased and occupied by Navajo people, which may have a negative adverse impact on Navajo people or lead to possible relocation.

T34: Comment noted.

T35: I would like to speak in behalf of all the eastern Navajo chapters. I am in a position where I strongly disagree with the proposed BLM lands to be given to the state. In addition, proposed private land exchange. If anyone is to receive land exchange, it should be the Navajo families already residing on these lands.

T35: See response L92.

Anine S. Yazzie:

T36: I just wanted to mention the grazing use of the land that we use and we pay grazing fee on it. I want to know -- I wanted the BLM to know that we wanted to continue the use of this land for grazing.

T36: Comment noted.

Jackson Gibson:

T37: In the interim, however, please be advised that the Navajo Tribe would request a preference in acquiring any lands located within the Eastern Navajo Agency in the event that land should become available pursuant to adopted alternative as a result of this process.

Leonard Tsosie:

T38: BLM knows the unique situation that is present within the Farmington Resource Area. It is dealing with many Navajo landowners that do not speak or write English. And still, it holds these type of hearings where it's almost totally in English and here there's no presentation given. And I think this takes away the knowledge that should have been granted to the Navajo landowners so that they could make a comment or decision regarding the plan that is being planned by the BLM. This is all that more important because this plan that is being contemplated is a 10- to 20-year plan. It's something that I would say would lock up the land for 10 to 20 years. And I think BLM should have presented to the various local Navajo chapters in detail. Instead, we just have this one public hearing out here.

T39: I would prefer an alternative that would include land adjustments where most of the lands located within the Farmington Resource Area be returned to the Navajo Tribe, because this was Navajo land. It's always been Navajo land and it is still Navajo land. Many of the Navajo people still live on there. And the only -- the only non-Navajo entities or persons that are holding land titles or use rights out there are big ranchers or big corporations. But individual people that are living out there are only Navajo people.

T40: At prior hearings, the Navajos that live within the Farmington Resource Area and within the FRLA regions have adamantly been opposed to BLM's plans for coal mining and for other land uses. Yet, BLM keeps producing documents and still intends to proceed with coal mining despite the Navajo objections.

T41: If BLM is not going to accept the alternative that I have mentioned, I would like to see it accept an alternative which is oriented towards resource cultural conservation. There are Navajos that live out there, and these Navajos have been termed squatters, but they do have rights. They are not squatters. And they should -- the land tenure plan should take into account these so-called unauthorized occupancies, and the BLM should help -- should help with this.

T37: See response L92.

T38: The purpose of the public hearing was to record public testimony concerning public comments on the RMP. Approximately 75% of the hearing was presented in the Navajo language and an opportunity given for Navajo interpretation of English upon request. The hearing introduction was given completely in Navajo and presented by the interpreter. There was ample opportunity for everyone to comment on the plan during the 6 hour hearing.

T39: See response T27.

T40: See introduction.

T41: As stated in the draft RMP (page 1-10) the Navajo Occupancy Resolution Program was initiated by the Bureau for this purpose. See also comment response L93.

T42: Regarding cultural resources, my definition of a sacred site is distinguished into two categories, general and local. And what I have failed to see in the RMP is that BLM has done nothing, almost next to nothing, about identifying the sacred areas. There are the general examples like the four sacred mountains and so forth which are sacred to all Navajo people. But there are local sacred areas, which is the land or a site that is sacred to a local Navajo family. The Draft EIS makes no mention of this, and even of BLM attempting to contact local Navajo families about these local sacred sites. These local sacred sites should be considered preserved for the Navajo families living there.

T42: See comment T23.

T43: Since it is BLM's position that small isolated tracts are expensive and difficult to maintain, then I would like to see the tracts in the White Horse Lake area, specifically at Township 18 North, Range 9 West; Township 17 North, Range 9 West; Township 18 North, Range 7 West; Township 18 North, Range 6 West, be included in the land exchanges or the land adjustment plan so that this land is given back to the Navajo Tribe.

T43: The lands referred to in this comment are within the exchange zone. An exchange proposal would be given proper consideration.

T44: Any disposal of land or public land, I would say should -- the BLM should give preference to the Navajo Tribe. The Resource Management Plan says that preference will be given to the State. We Navajos that live out there adamantly are opposed to this plan. We don't want the land to be given to the State. We think the Navajo Tribe should be given preference.

T44: See response T92.

T45: The RMP mentions that 500 home sites have been legalized. I would say that BLM should attempt to legalize more home sites that are existing out there and there are more home sites out there. Not just 500. And this should be done at no cost to the Navajo Tribe.

T45: See response T41.

T46: Previously, BLM and the Navajo Tribe have exchanged lands. And we, as the Navajo people, do own these Navajo Tribal lands, but we have to give that up so that, you know, some unauthorized occupancy could be -- could be legalized, and we do not like that.

T46: In the exchanges that have been accomplished, the Navajo Tribe has received lands of equal value for the lands that they have transferred to the United States. The value of land owned by the Navajo people has not decreased because of the exchange.

T47: Regarding water rights, BLM should not only identify and quantify federal water use and rights. It should also do the same for the Navajo Tribe. The reason being is that you, BLM, as an agency of the Federal Government, do act as a trustee for the Navajo Tribe. And we, the Navajo people, are the Navajo Tribe, and we think we own those water rights out there. And you should quantify those water rights for us, too, at no cost to us.

T47: The BLM does not administer tribal trust lands.

T48: In reading the EIS, I come up with questions like, "How can you have long-term impact of deterioration of woodland under the Resource Conservation alternative," which is alternative B? "How can you say that the woodlands are going to be deteriorated when you alternative or you plan is going to be that you're going to maximize the resource or limit the destruction of the resources?" And here you're saying that the woodlands will be destroyed or deteriorated.

T49: Another interesting point, too, is that regarding the soil impact, you say that two percent of the soil would be impacted under alternative B, and one percent under C. I thought it would be vice versa; that if it's production-oriented, you would have -- more soil would be impacted under alternative C rather than having it be less than B. And it's interesting to note these fallacies in the EIS.

James Samuel:

T50: First of all, I oppose the proposed land exchange, Indian land exchange. We want to keep what we have. We've been living on this land for a long time.

Ruben Marleno:

T51: Our official from Window Rock never did notify us on this meeting. Some of us, we have lands, Indian allotments, in the area we use, and we don't want to move away from our present place or away from our land. We want to continue using the land, live where we're living right now. We wanted to save it for our children and grandchildren's use in the future. I kind of disagree with the plan that I heard that was presented, but there's some questions about moving or relocation. Where do we move to? There's no place to move. There's no place to move.

Jimmy Thompson:

T52: What you are talking about here, the public land in these areas where there's yellow, it shows yellow on the map, we'd like to get all that back, especially the ones that are kind of scattered with the Tribal land or our land and the allotment around it. We'd like to get all that back. I know if we get it back, if it becomes a Navajo Tribal trust land, we probably will pay for it. And if we do get it back, I know we will need a home site lease on it. This is what the white man does anyway, when he has a private land. He takes care of it as his own.

T48: Forestry is not one of the programs emphasized under Alternative B (see page 1-26). As stated on page 3-23 of the draft, the potential for woodland deterioration exists due to reduced management emphasis and the likely increase in illegal cutting which would impact woodland sites.

T49: See response L90.

T50: See General Response to Comments on Land Ownership Adjustments.

T51: The RMP does not propose to relocate anyone.

T52: See response L100.

Mattie Begay:

T53: But I just wanted to say that this land is ours and we just wanted to keep it as it is.

T53: Comment noted.

Lincoln Perry, Senior:

T54: I wanted to make sure that they understand that we do not want an exchange or we do not want to purchase. We just want the BLM to give these tracts of BLM land that are in the southern part of the resource land back to the Navajo Tribe. Our livestock operators, people that are herding sheep, are now using it. They are paying grazing fee to the Navajo Tribe, and they return back to BLM. The public land should be reconveyed to the Navajo Tribe and our officials in Window Rock are aware of it.

T54: See response T39.

Samuel Harrison:

T55: I think for the records and also for input on the management plan, I think within the seven points, one of the main things that we have not seen in the plan with all the public hearings that have been sponsored, and also with all the management plans that have been implemented, one of the things people have been asking for is, why not just give 160 acres allotments to all those families that are currently designated as squatters on Federal -- supposedly Federal lands.

T56: And one of the other things that needs to happen, I believe, is one of the things that we encounter today is the use of wood fuel. We have to get a permit, and a lot of times we have to purchase all those things in order to have wood for fuel and also to utilize for each of the families that are currently residing in Nageezi area. A lot of these families, that is their only source of fuel. They do not have gas, they do not have electricity. So that is one of the main abuses that we see as far as the BLM is concerned.

T57: And also, the wildlife protection is inadequate. We experience a lot of abuse of land and a lot of discrepancies when all of these hunters from all over the United States come into that area, into the Gobernador and also the Crow Mesa area to hunt. And these people are not controlled. They are not regulated. They are not monitored. There is no one out there to really say these things shouldn't be done.

T58: If there is to be a coal leasing program for any suitability assessments, I think that it should be restricted to uninhabited coal sources. And permits for uses for those coal should be preferenced to the local residents.

T59: And for transportation, a lot of the roads that are currently under right-of-way to different companies are not upkeep. They are not maintained. They are not repaired. And a lot of these roads go in across allotments of people. And I think these should be monitored and they should -- these companies should be restricted and tell them outright that they need to operate -- update and renovate and also maintain these roads.

T60: And there are a lot of holy, sacramental type of areas in our communities, both as for families and also for chants and also for the Navajo people. And I think these -- a lot of these things are being abused. And I -- hopefully, these will be identified specifically; and also, that lands around -- surrounding these areas will be secured for individual Navajo families and the tribe.

T55: It is extremely difficult to acquire an Indian allotment today because most public lands do not meet the requirement of the allotment laws and regulations. Little cultivable land remains in the public domain. What does remain requires expensive improvements (irrigation systems, wells, etc.). The grazing lands provide limited amounts of forage. The acreage allowance of the Allotment Act (40 to 160 acres) makes it unlikely to find a tract which would yield a reasonable income from farming or grazing.

T56: Permitting is necessary to ensure that wood harvest does not exceed the available supply. Federal regulations and the resulting Bureau policy require that the BLM charge fair market value for wood products removed from the public land. In the case of fuelwood the charge is calculated as one tenth of that charged by commercial suppliers.

T57: Hunting regulations are set by the State of New Mexico and enforced by the New Mexico Department of Game and Fish, not the BLM. Violations of these regulations should be reported to that agency. Through Operation Respect the BLM and NMDGF are attempting to reduce conflicts during the hunting season.

T58: Potential coal lease tracts are evaluated on a case-by-case basis in order to make unsuitability determinations for various environmental factors, including inhabitants. Coal licenses are issued for home fuel use by local residents.

T59: Roads on public land are required to be maintained in accordance with the stipulations on the right-of-way grant. Depending on the type of road and land status, responsibility for ensuring compliance may fall on the BLM or the BIA. If you bring concerns about specific roads into our office we will try to assist you or refer you to the appropriate office.

T60: See responses L33, L67, T23.

T61: And a lot of the right-of-ways that have been approved since 10, maybe even 30 years, have not been updated. And we believe in the Nageezi area, that these right-of-ways should be limited. They should be limited either on a yearly basis or even on a two- to five-year basis. Not over 20 years or not as indefinite as they are now. And that's one of the main things that -- and that way, the local people can have control if they see any abuse of land or discrepancies that occur when people utilize these lands.

T61: See T59.

T62: And also, a lot of the people that are involved in the actual planning process do not have direct or -- direct involvement of the local people. And I believe there should be some task force identified from the local areas to sit in on your planning sessions and to say, be involved and also to know and tell you or remind you that -- remember, at this time, in point of planning, these are the public hearings. These are the people that have questions, this and that, that have input. This is where they should be put.

T62: Contact your local chapter president.

T63: And of all the manuals that I have received, none of the things that were said in the previous public hearings are not even considered there. They're not even put there. It seems to me like this -- it was just a repetitious-type of a manual that we receive all the time. And I think that should be considered.

T63: Assuming you are referring to public hearings during past planning efforts, you can be sure that decisions reached as a result of public testimony are incorporated in the RMP.

T64: We feel that we need to have the Tribe and also the local chapters designate certain people to sit in on your planning sessions in order to come up and to shorten the length of time of the processing of any of these resource developments. And I would like to express my appreciation for you gentlemen for coming out here. And I totally agree with a lot of the people that have submitted testimony, saying that the chapters that are affected should be given a detailed orientation on your plans.

T64: Contact your local chapter president.

Earl Arthur:

T65: And today, we talk about relocations, and we talk about relocation, and when I was there, I had a dream that -- I had a dream that I was going to live in peace in this land, peace and serenity of this land. There, when I was overseas in the foreign wars, I dreamed about this good old USA. What happened to that good old USA, the land of good opportunity, for land of freedom and religion, freedom of speech? I've been already relocated once. I've been relocated on the land dispute of Navajo JUA. That is more than enough. And now, I find myself in another dispute between BLM.

T65: See Introduction.

T66: Boy, this is a shame, isn't it? I dreamed that my for -- my kids will grow up on this land and their kids and generations, without the government trying to poke under their grounds. They wouldn't like it if I start digging around under their house somewhere saying that "there's a little coal under there. I want to take it out." I'm sure they don't like it.

T66: Comment noted.

T67: And there's another -- in essence, I think there's another scandal in this also. The reason I think this, is that why they do not notify us in time until the last minute. These are the kind of stuff -- this is the same thing that went through in the Navajo JUA. They don't start notifying people until the last minute, until the last papers of documents and draft up the papers. They start notifying people because then, then it's too late, they then notify people. That's the dirty trickery of the white man.

T67: Comment noted.

T68: And what I think, is I'm deprived my rights as a veteran of the United States a place to live. I ain't the only one that's been deprived. There is old men and old people still looking over the fence where they were living at. And their dreams is that to go back over that fence and still live where their heritage were at, their sacred grounds, their ceremonials and their cultures, where it all lays behind the fence. And today, we're doing that. We're dealing with the same thing again. These are the things that a lot of people, they're being deprived, deprived of their rights, the right to live. And destruction of humanity is what it is. Our forefathers has lived on this land long before the white man came to this world.

T68: Comment noted.

James Francisco:

T69: I just wanted to say that we should continue working in getting our land, the public land, back.

T69: Comment noted.

T70: We'd like to ask BLM to deed all the oscillated tract and other land like 2198. I think that 2198 is what's pending. And what it was pending, we found that the Navajos are living on it and the Navajos are using it. So all we had to do is get together and ask the Congress to transfer that to the Navajo Tribe. And I think at Ramah, they already transferred all the 2189 land to the Navajos at Ramah. So we can do that. I think that's what they're asking.

T70: See Introduction.

Marlano Pino:

T71: I understand long ago that this is our land, and the land is reserved for us and for our children and our grandchildren. I was just wondering, maybe the government or the people that are working on this are working towards something like the relocation from the reservation, people that's been relocated to a different area.

T71: The RMP does not make recommendations for the reservation, nor is the BLM involved in any relocation plans.

T72: So the people in BLM, if you keep working on this, keep us in touch and let the people know what's going on, and decisions shouldn't be made just among yourself. It should be left to the people here, too. We are concerned just like anybody else.

George Martinez:

T73: And also, I wanted to mention that we wanted to request to continue the use of the firewood on public land in these areas.

Frank Willetto:

T74: That's why we are here speaking against this plan. Give the Bureau of Land Management so-called land back to the Navajos individually or to the Tribe. I don't see why it cannot be done.

T75: Why are we only being told that we only have the subsurface? We only have the surface, and yet, the grass grows into the subsurface. That's where the grass comes from. So we've got to have it all the way down.

T76: The majority of the people that live on this area are Navajos. And why are we still trying -- the Bureau trying to hold onto it? A few ranchers and the United States Government is trying to hold onto some little things. I thank you very much.

Exhibits Turned in at Crownpoint Hearing:

T77: I strongly disagree with the proposed BLM land to be given to the State, in addition, private land exchange. If anyone is to receive land exchange it should be the Navajo families already residing on these lands.

T78: 2. The Bureau of Land Management which is under the SECRETARY OF THE INTERIOR OF THE UNITED STATES GOVERNMENT has plans to dispose of its land in our area and we (Chapter) strongly oppose any such development which may result in possible relocation of NAVAJO families who reside on BUREAU OF LAND MANAGEMENT land.

T72: Refer to Chapter 4 Public Involvement section.

T73: Unless conflicts with other resources occur, dead and down fuelwood collection would be allowed resource area-wide (page 1-38).

T74: It is not in the National Interest to dispose of public lands and not receive other lands or money in return for the lands transferred to the Tribe.

T75: Various laws providing for the disposal of the surface for settlement, stock raising and so forth have reserved the "minerals" to the U.S. Court decisions such as the case of Watt vs. Western Nuclear have clarified the question of exactly what was meant by minerals.

T76: See response L180.

T77: See response L92.

T78: Neither the BLM nor the RMP is advocating the relocation of any individual or group of people. Disposal of the land to the Navajo Tribe could even provide a method of authorizing the currently unauthorized occupants.

T79: 1. The CHICHILTAH CHAPTER hereby strongly oppose the proposed plans of the SECRETARY OF THE INTERIOR and the BUREAU OF LAND MANAGEMENT to conduct any activities on Bureau of Land Management lands that are presently being leased and occupied by NAVAJO people, which may have a negative adverse impact on NAVAJO people or lead to possible relocation.

Pertinent Portions of Transcript from Public Hearing at Farmington, New Mexico, May 6, 1987

George Yazzle:

T80: Number one is in regard to the public land in the off reservation area. As you know, our forefathers, our grandparents had used this land for a long time, and we'd like to get it back as our own land so we can use it as our own.

T81: Number two, last winter, we had a real hard, cold winter, and that's when everybody realized that the BLM somehow should leave the wood hauling areas open. We need these for heating and cooking since there's no electricity. Is there any way the BLM can leave the wood hauling areas open in the wintertime?

T82: Number three is in regard to the Bisti wilderness area. One of our Navajo people is living on the public land inside the wilderness area. I'm requesting a boundary change, if possible, to move the boundary line to the section line around this Navajo occupant's house so he can be outside the wilderness area.

T83: Number four, Huerfano Mesa is a sacred mountain to the Navajos. This mountain is without the four sacred mountains; Mt. Taylor and the San Francisco Peak in Colorado and Blanco Peak. So there should be some kind of a boundary around these sacred mountains and other sacred areas to make sure that it's not being used.

T84: And number five, I'd like to mention the right-of-way, which I'd like to request to leave it open or leave it where we can use it for different things.

T85: And also, number six, on the Huerfano Chapter, which I represent, there should be a representative from that chapter maybe to work with the BLM on these papers such as RMP.

T79: The BLM is required by law (FLPMA) to manage the public lands on the basis of multiple use and sustained yield.

T80: See response L92.

T81: Wood cutting is normally allowed until January 1 unless bad weather conditions result in an earlier closure. During such periods, as during the past winter, such a closure is, in reality, only an administrative procedure since snow and mud close the access roads and make entry to the wood cutting areas impossible.

T82: The unauthorized occupancy is noted and alternatives presented in the Bisti Wilderness Management Plan. One alternative evaluated was adjusting the boundary. Another was to issue a title estate lease to the occupant. Congress must make the final decision on all boundary adjustments.

T83: Huerfano Mesa has been designated a Special Management Area and is described on page A1-33. A proposed Memorandum of Understanding with the Navajo Tribe and BIA should identify specific management prescriptions that will be jointly applied by all parties to the agreement.

T84: The right-of-way refers to access to private inholdings within the De-na-zin Wilderness. Resolution of the access issue is currently being pursued in preparation of the wilderness management plan.

T85: Input has been requested through the planning process. We have met with many chapter representatives in the early stages of RMP development. We continue to seek comments on our plan.

Frank Sandoval:

T86: And of course, home use fuel service or the wood, predominantly wood for our Navajos out there who do not have, a lot of times, any other source of fuel. Sometimes coal, which is hard to get. And I reiterate what Mr. Yazzie said, that, hopefully, that the final draft will address some sort of equitable resolve on this matter.

T87: Then Mr. George Simpson has the main grazing area within the wilderness area, which I just mentioned, Sections 3, 4, and 5, and he has a home in the southeast, southeast corner of Section 3. And we would like to adjust that land to miss his house.

T88: And the other one that kind of bothers us is the motorcycle racing up here on top of the hill. And that is the Head Canyon, ORV competition area. It's on 87, if you -- those of you that have the book. There is one permittee there. One Navajo family lives in there. Eloise Martinez, Kathrine Johnson, Paul Jim. And that motorcycle racing is right along the highway there. That should be looked at more closely with that permittee. And the page before, 86, is the same thing. It's the dune ORV. I see that recreation area is outlined totally within Navajo grazing area.

T89: One of the things I would like to see the final draft have is where the Navajo has grazing area. I notice in the draft, it doesn't have --- it doesn't address the Navajo permittee, their actual permitted area. The way I do, is, for my people, I draw in the grazing areas like I have here in red so the Navajos know exactly what's going on. So in the final draft, I would like to see the grazing permittees' area drawn in, which never is done in all these studies. Every time I get a book, I always have to draw in where the Navajo use areas are. The public, when they look at it, doesn't understand there's Navajos grazing out there. They pay by the acre, so much cents an acre.

T90: And then if this racing or the recreation is put in, I would like to see some kind of compensation for taking away that much grazing area from these people.

T91: Oh, and then the -- I just want to touch on the date I was in the De-na-zin wilderness area. The Navajo people are having a hard time understanding the ingress/egress, which Mr. Yazzie mentioned, and they can't understand. They've used this before Columbus came and wonder what -- how come all these rules now. And within the De-na-zin, as you are all aware, there's nine Indian lots, trusted allotments, and there's one lady that is said to be trespassing. She lives on the public domain land within the De-na-zin area. Hopefully the final draft will address her and the other will be addressing the allotments within it.

T86: See comment response T73.

T87: See response T82.

T88: There are no occupancies within either the Dunes or Head Canyon SMAs. The Dunes SMA, while located within the Head Canyon allotment, does not encompass the total area of the allotment, therefore grazing is still possible. The area of the proposed SMA has historically been used by local ORV enthusiasts. Designation of this SMA is partly for the purpose of providing a place for ORV activities to take place and is not expected to drastically change current levels of livestock use.

T89: Because many allotments in the issue area are administered by the Bureau of Indian Affairs (BIA) (see response to comment L38), the BLM does not have current records for all Navajo use areas. However, we did indicate, in Table 1-3 and Appendix H of the draft RMP, which allotments are covered under the Memorandum of Understanding between the BLM, BIA, and the Navajo Tribe.

T90: Refer to response T88.

T91: Refer to response T84.

Allen Christy:

T92: First of all, we'd like to say that we're here tonight to support the proposed alternative, alternative D, of the land use plan.

T92: Comment noted.

T93: And in my final comment, as I was telling Ron Fellows, I think this document they've done is an excellent document. It's the first federal document I've been able to get through and been able to read from a layman's term. I think they've done an excellent job of that. So again, the panel and also the group that put this together is to be commended. Again, I thank you.

T93: Comment noted.

Stella Lee:

T94: Then the next thing I would like to say, is that I do like your preferred alternative D, which is to bring out the balance management direction.

T94: Comment noted.

Sam T. Sandoval:

T95: There are certain Navajo allotments that are grouped by quarter sections, and some of these allotments are leased for drilling. But they are laying idle. Geographically, I mean geologically, there are great reserves of oil under these allotments. What I say is, who has jurisdiction over drainage and we need to monitor these drainages. There are hundred and hundreds of barrels of oil leaving from these allotments. Outside of the allotments are drilled, the exterior of the allotments that are grouped together. And some of these Indian allotments, like I said, are leased to be drilled. And there's been thousands and thousands of barrels transported out of there and not one barrel for the Indian allottee.

T95: The Albuquerque Office of BLM monitors potential drainage situations on a continual basis. Established procedures are followed when drainage is identified and compensatory royalty is collected when appropriate. When allotments which are not leased are being drained, the BLM advises BIA to lease the land so that compensatory royalty may be paid from the time of leasing.

T96: And some of these allotments have preference rights leases at this time for coal on the allotments. The allotment -- the allottees are short-changed a quarter of the 160 acres, and there should be some compensation for these shortages of the 160 acres, because the allottee has all the mineral rights.

T96: At present, the PRLAs have not been adjudicated. No interference with surface use is presently occurring. As to the mineral rights, if the lands are under PRLAs, the federal government owns the minerals, not the allottees.

Pertinent Portions of Transcript from Public Hearing at Cuba, New Mexico, May 7, 1987:

John Martinez:

T97: Tonight's subject is discussing the public land and, at one time, we went through a land exchange with the BLM and the Navajo Tribe. I just wanted to know if this is going to be handled about the same way again, and what would it cost. How would they handle the cost on the land? I know there's different costs on different land because of the topography. Different areas are rough and some are flat and some pretty good country. So the cost is different. I just wonder how they're going to handle this. There are range improvements, such as fence, windmills, on these lands. And are they going to compensate for these improvements? It sounds okay to me, but I know it probably will take time.

T98: Number two, I'd like to make a statement on coal. When they start working on coal, are they just going to work on the public land? And I'd like to know when. When would they start working on the coal? How will it affect the Navajo people that are living in that area? If they had to be moved away from the coal area, would they get another land or a use area for these people to move on? I'm concerned about coal because I seen different good countries, all the way from Bisti and around that area. About two years ago, we made these trips, you know, looking at different areas, and they look pretty good. And I just wonder how they're going to strip mine this area someday. When I used to work on the railroad, I noticed a mining that took place that was in Hanna, Wyoming, and this is where they're mining coal underground. There's no disturbance on top. People are still living on it. And I just wonder, maybe that's the best way to do it, if they have to mine coal, is to do it underground mine. The strip mining takes a lot of work and sometimes the vegetation doesn't grow back. It's hard to reclaim. As you can see it going towards Window Rock, the mine going on right by the highway, you can tell that it's not reclaimed right and the vegetation is not really coming back, the native plants.

Martha Cordova:

T99: I just wanted to make a brief statement to Ron Fellows and company, respectfully. A lot of us were not aware of the hearing. Most of us do not read the Farmington paper or listen to the Farmington radio or television. And I would like to request that in the future, if you're going to have any meetings in this area, would you please publish it sometime in advance in the Cuba News, which is a monthly newspaper only. And so you need to get your information in to that newspaper about -- I think it's the second Thursday of the month. And the paper comes out on the third Thursday. So sometime you've got to get the information six weeks ahead of time.

T97: Federal exchanges are not based on acre per acre. They are based on equal value. This means land with an appraised value regardless of the acreage in either tract.

Because two tracts of land are never equal in value, a money equalization payment is often required. This means the owner of the tract of lesser value balances the difference in the equal value by making a money payment to the owner of the higher valued tract.

Determination of appraised value is made by BLM appraisers. They utilize the Market Data System of appraisals. This system establishes land values by comparing disposal tracts to land sales of similar tracts on adjacent lands.

The party receiving lands in an exchange would be required to compensate the owner for all authorized improvements.

T98: Most of the near surface coal in the area would be more economical to strip mine. Leasing regulations and standards are created to ensure that the land is returned to productivity.

T99: Comment noted.

Victor Velarde:

T100: As Mrs. Cordova pointed out, we didn't have much of an opportunity to get local response to the plan or even to get a change to read it.

T101: I would like to go down on the record with several things. One of them would be that most of your resource plans that come out of government agencies are far too sophisticated for the area residents, including myself. And I feel that the language in there should be more direct and should not contain so many technical descriptions and should be written in a way that people with a high school education could understand well and be informed.

T102: And I would also like to enter into the record that as a community, we oppose any more acquisition of private land.

T103: And I think this is an undue burden on these people in the name of having a wilderness area declared for environmental study. I think that the environment has been studied quite enough. I think the EPA, the EID and other government agencies are very well alert to any of the problems that might arise. I don't see any more need for study of wilderness area in the sense that it would shut people out from use of public land. I would oppose that in any draft and in any final resolution by the Bureau of Land Management.

T104: If there is any timber industry in Bureau of Land Management land, I would recommend very strongly that the economy of the local areas are tied into the timber industry and into the ranching industries. I think that it has been an ideal that has been set out by so many people, the so-called environmentalists included, that there are people who still live off the land. Well, if this isn't living off the land, I don't know what is. And I don't think that any agency of the government should now come in, directed by a group of people that mean well, but are really not informed as to the local economies, to stop the production of timber, the harvesting of it, or the limiting of the grazing rights or closing any corridors for access to the grazing areas.

T100: The record shows that you were on the RMP mailing list back in 1985 at the issue identification stage. In an attempt to reduce unnecessary or duplicate mailing a questionnaire was sent to everyone on the list asking if they wished to continue to receive RMP information. We assumed you did not wish to remain on the mailing list when we did not receive a reply to our request.

T101: We have made every effort to keep the document simple and readable. However the BLM is responsible for a variety of complex technical programs which cannot always be described without using technical terms. A glossary was placed in the document to assist the public in understanding these terms.

T102: Comment noted.

T103: The Bureau is directed by Congress to study areas suitable for wilderness designation.

T104: Commercial timber production off public land in the FRA is minimal. The economic impacts of each alternative are analyzed in Chapter 3 of the draft.

Paul Robinson:

T105: Page 360 is a real final conclusion sort of a page, and it says that "nearly every issue would have some social and economic consequence, but none of the economic consequences are believed to be significant." Now, they not be a significant from a national standpoint, but I think that they're really very, very significant to the people who have spoken, to people in the audience who are speaking from the communities in the area. Two or five percent range reduction is really important and significant from an impact standpoint. And I think it would deserve more attention.

T106: On these lands that the coal belt is being separated out, I think that that's a very different planning scenario than was conceived of in the San Juan Basin Coal Management studies which were done by this office, and that's worth explaining why that's delayed. And I might recommend that some interim land uses be planned for those coal lands. Those lands are going to maintain their coal values whether grazed, whether leased for oil and gas, or whether subjected to some water resource development. They're valuable lands. They're located strategically, and I think they would be worth considering in terms of an interim land use.

T107: It sounds like it's going to be -- the full resource management plan will be the next phase before anybody really develops coal on federal land, with the single exception, I understand, of the Fossil Forest. Whether Sunbelt Mining has prepared a mine plan outline that they've released to some of the chapters in the area that shows the southern half of the Fossil Forest being in one plan mining option and not another of the mining, that's worth clarifying in some detail before the final comes out so that there's not a land use conflict there.

T108: I'm particularly interested in water resource development. I feel like the alluvial ground water, the deeper ground water, of the San Juan Basin is a really large resource. It's untapped. And I think you should try and provide some water resource development, as well as erosion control or appropriate BLM activities, would really help the area.

T109: Oil and gas is certainly the biggest ticket mineral in the San Juan Basin, and there's some minerals that are yet to be explored in some of the retention transition areas. And that's a very important area from an oil and gas standpoint, because it's sort of the same beds, a little bit deeper, that really is not recognized in that it is such a significant contributory to the local economies.

T105: We recognize (on page 3-60 of the draft RMP) that there will be negative long-term impacts to individual operators. The difficulty with quantifying the impacts was addressed on page 2-33 of the draft. Because of that difficulty, quantifying the impacts to each affected individual was not possible. However, the determination was made that the total magnitude of the impact was not expected to be significant on a regional or local basis.

T106: The coal belt SMA was set aside to prevent its disposal and other existing uses are expected to continue on these lands until and after mining. Refer to the Coal Belt SMA description in Appendix 1 of the draft RMP.

T107: By 1992 the BLM must submit to Congress a long range plan for the Fossil Forest that will address the question of whether any mining will occur in the area and, if so, how much of the area will be allowed to be mined.

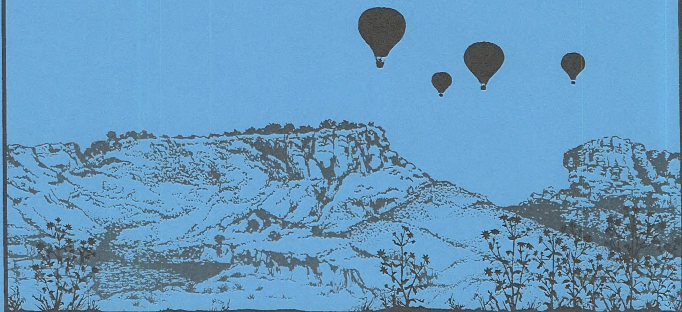
T108: Continuing management guidance for the rangeland, soils, and hydrology programs identify the procedures and authorities for locating and developing sources of ground water and for protecting soil and watershed resources.

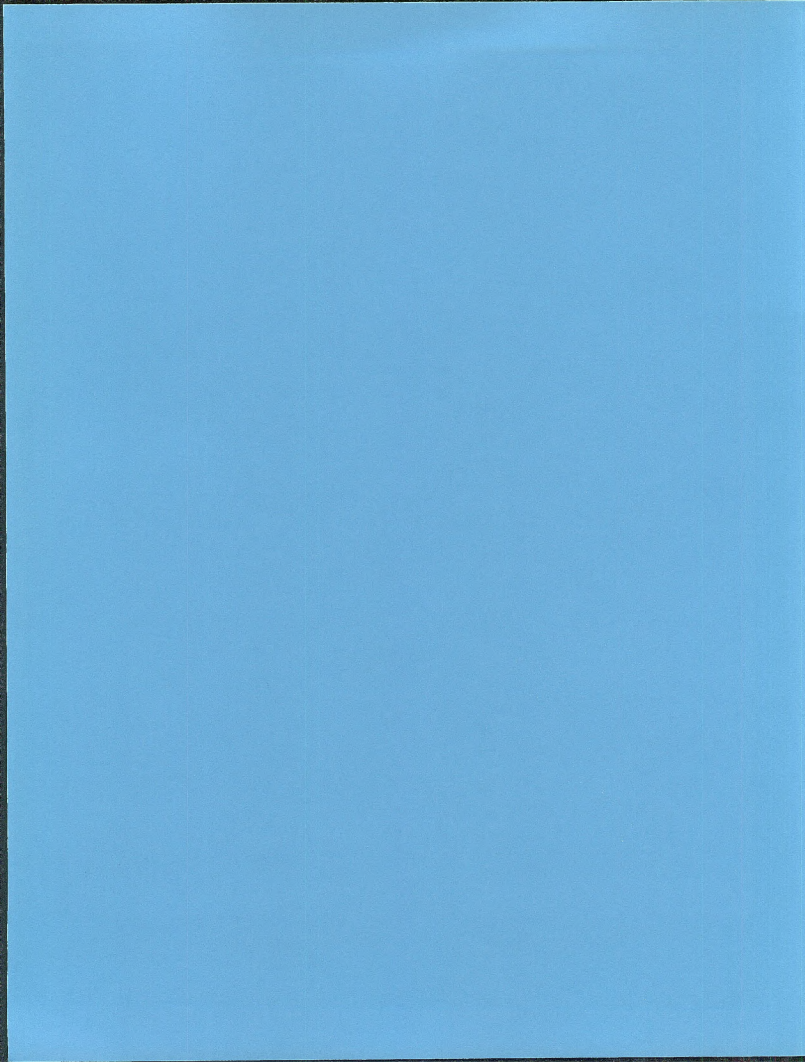
T109: Under the land disposal scenario, the mineral estate would be retained because it has known mineral values such as being classified as a Known Geologic Structure (see Section 209 of FLPMA). This would allow for future exploration for oil and gas.

T110: That I think the consultation process could be vastly improved. I think that your commitment to hold a meeting with local folks is quite important, but the problem is, going through the plan, understanding the plan, and trying to have a reasonable set of options to propose. And I would recommend the agency try and develop a continuous communication mechanism rather than public meetings only in response to major plans. There really haven't been meetings on this plan since 1985, and that's two years. And I think that you would find people quite interested in talking about the plans if they had a chance in their communities.

T110: The Bureau is very interested in any mechanism you would propose to improve communications. Please share your ideas.

Appendices





APPENDIX 1

Special Management Areas

INTRODUCTION

This appendix contains information on the Special Management Areas (SMAs) included in this Resource Management Plan. The SMAs include areas identified in existing land-use plans as well as newly proposed areas requiring special management.

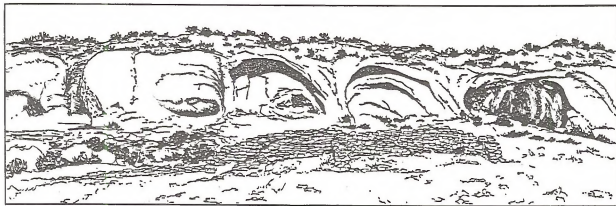
The text for each SMA includes a general description, management goals, and management prescriptions as well as a corresponding location map (sensitive resource values may not be mapped). The descriptive narratives of each SMA provides generalized background information on the area. The management goals state the general emphasis for administration. In an attempt to direct the necessary funding toward on-the-ground management of special resources, management prescriptions for each SMA are generally listed in the order in which they are targeted for implementation. Some SMAs will require activity level planning, therefore, the implementation order of their prescriptions is designed to be flexible in adapting to new information. Detailed activity plans, to be developed after RMP approval, will contain more specific types of information. It is important to note that information described in this document is subject to modification during activity level planning. Where possible, management prescriptions for SMAs will be implemented upon RMP approval.

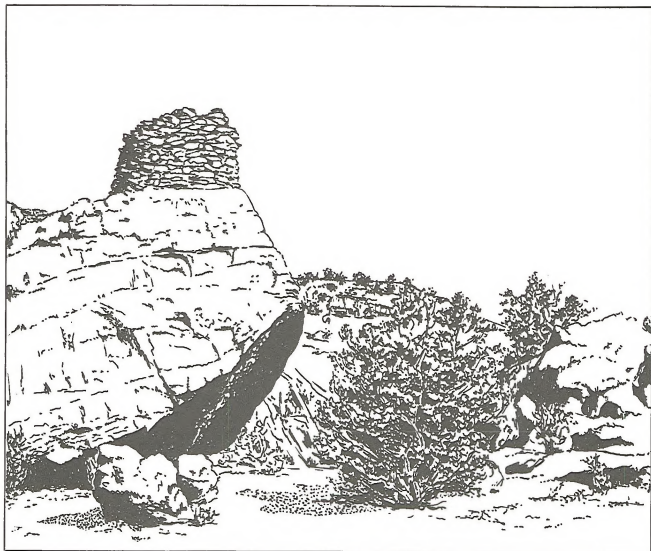
Some of the prescriptions may be implemented simultaneously regardless of their order but ORV designations and implementation plans, mineral withdrawals, and land actions will usually be carried out first.

Management prescriptions do not invalidate prior existing rights. When the prescription of No Surface Occupancy for oil and gas development appears for individual SMAs, it only applies to new leases. In areas with existing leases special stipulations on applications for permits to drill and siting requirements are the only means by which the BLM can protect sensitive resources.

The prescription for implementing ORV designations after RMP approval will include a public map/brochure with accompanying narrative to provide public information on where ORV use is acceptable or unacceptable. On-the-ground regulatory signing will be implemented in all SMA's restricting ORV use and informational/educational signing will be placed in selected locations designated as "open" to provide public awareness of possible effects of off-the-road vehicle travel. More detailed ORV designation steps will be prepared and included for those SMAs requiring activity level planning.

The SMAs are listed on the following page and discussed in the same order.





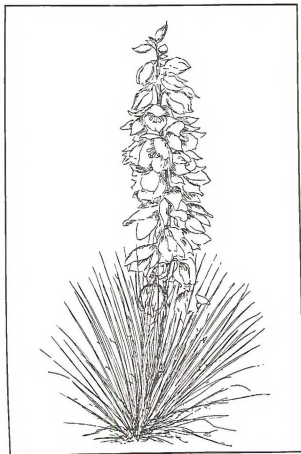
Special Management Areas

RECREATION

1. Dunes Vehicle Recreation Area
2. Head Canyon ORV Competition Area
3. Simon Canyon Recreation Area
 - (a) Simon Canyon ACEC
4. Angel Peak Recreation Area
 - (a) Angel Peak ACEC
5. Carracas Mesa
6. Thomas Canyon
7. Negro Canyon
8. Glade Run Trail System
9. Continental Divide Corridor

WILDERNESS

10. Bisti Wilderness
 - (a) Badlands ACEC
11. De-na-zin Wilderness
 - (a) Log Jam ACEC
 - (b) Lost Pine ACEC
12. Ah-shi-sle-pah Wilderness Study Area



CULTURAL RESOURCES

13. Navajo Refugee Sites (26)
14. Native American Traditional Use & Sacred Areas (4)
 - (a) Gobernador Knob
 - (b) Tanner Lake Battlefield
 - (c) Salt Point ACEC
 - (d) Huerfano Mesa
15. East Side Rincon Site
16. Chaco Outliers Group (8)
 - (a) Kin Nizhoni
 - (b) Pierre's Site ACEC
 - (c) Halfway House ACEC
 - (d) Twin Angels ACEC
 - (e) Jacques Site
 - (f) Andrews Ranch
 - (g) Holmes Group
 - (h) Casamero Community ACEC
17. Chacra Mesa Complex & ACEC
18. Farmer's Arroyo Site

FORESTRY

19. Laguna Seca Mesa

MINERALS

20. Beechatuda Tongue
21. Coal Belt

LANDS

22. Right-of-Way Windows (4)
 - (a) Torreon
 - (b) Continental Divide
 - (c) Escavada
 - (d) Betonnie Tsosie

WILDLIFE

23. The Hogback ACEC
24. Reese Canyon Research Natural Area
25. Aztec Gilia ACEC
26. River Tracts
27. Bald Eagle ACEC

PALEONTOLOGY

28. Torrejon Fossil Fauna ACEC
29. Kutz Canyon Paleontological Area
30. Betonnie Tsosie
31. Fossil Forest Research Natural Area

WATERSHED

32. Farmington Lake Watershed

1. Dunes Vehicle Recreation Area

• GENERAL DESCRIPTION:

The Dunes Vehicle Recreation area comprises about 1,000 acres of land just south of Farmington, New Mexico. Public access is provided from State Highway 371 along moderate to steep unmaintained routes.

The south, east, and west boundaries of the area are well-defined by steep canyon walls that give way to talus slopes. A wide range of topographic relief is available in the form of wide sandy washes, rock-filled arroyos, sparsely vegetated hills, and moderate to steep slopes consisting of loose rock and solid canyon walls. Vegetation is minimal with the major species being common grasses and juniper trees.

Oil and gas exploration and off-road vehicle activity make up the major use of the area. Competitive events such as hill climbs are popular among local residents, but the area is mainly used by ORV enthusiasts who enjoy a variety of motorized recreation opportunities. Diverse landforms challenge both man and machine. Over 30 years of use has produced an area of dunes and well established hill runs and trails.

Even though actual visitor use is unknown, observation of weekend users and inventory of the many well-defined vehicle trails indicate moderate to intensive ORV use. Scattered home sites to the north represent potential problems. Noise and trespassing

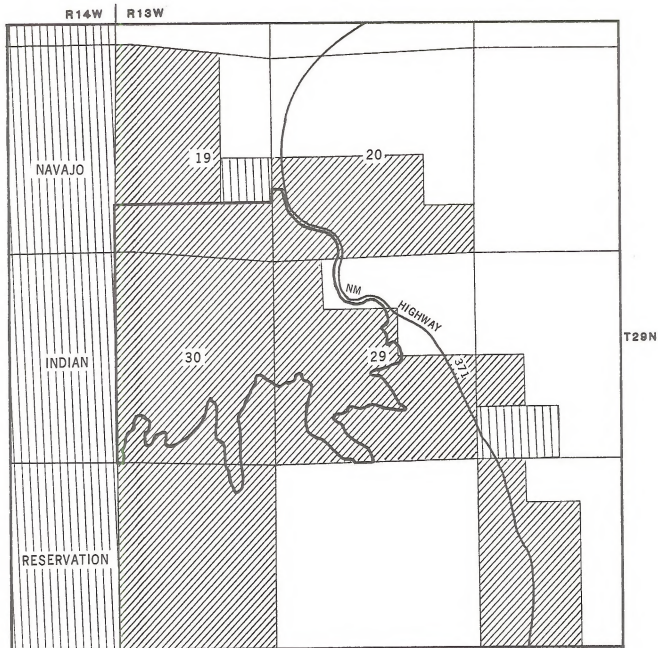
have been reported due to uncontrolled ORV use. Auto wreckage and scattered trash exist below the escarpment along State Highway 371.

• MANAGEMENT GOALS:

The primary goal for the purpose of management is for ORV freerplay and authorized events. Administration is intended to be non-supervisory with minimal restrictions and facilities as necessary to meet the goals of minimizing user conflicts, promoting public safety, and protecting resources.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "open" ORV designation and implementation plan.
2. Acquire non-BLM inholdings.
3. Designate as Special Recreation Management Area.
4. Prepare Recreation Area Management Plan.
5. Pursue Cooperative Management Agreement.
6. Apply VRM Class IV objectives.
7. Complete 10% Class II cultural resource inventory to determine site density, existing impacts and potential impacts resulting from ORV use. Additional inventory and mitigation requirements will then be determined in consultation with the SHPO.
8. Complete fencing, signing and other administrative projects such as information displays and parking facilities.



LEGEND

 SMA BOUNDARY
 BLM LAND
 INDIAN LAND
 STATE/PRIVATE LAND

0 1/2 1 MILE
SCALE

N

MAP AREA

FARMINGTON
RESOURCE AREA

MAP A1-1
DUNES VEHICLE RECREATION AREA

2. Head Canyon ORV Competition Area

• GENERAL DESCRIPTION:

This SMA includes about 150 acres of public land abutting the east side of State Highway 371 just south of Farmington, New Mexico.

The terrain in the northern portion is relatively flat and slopes gently upward toward hilly topographic relief in the southern portion. Vegetation is sparse and consists mainly of common grasses and a few scattered juniper trees.

Major use of the area includes oil and gas activity and competitive motorcycle events. Oil and gas storage facilities and pipelines are located within the SMA near two-track vehicle routes. Past ORV competitive events are evident from an existing motocross course which includes well-rounded berms, jumps, corners, and the placement of rubber tires for barriers and course markers. The area has been used for many years as indicated by the well established course which dominates the landscape within the SMA.

The costs of environmental compliance have reduced the number of applications in recent years for competitive events. The low membership in a

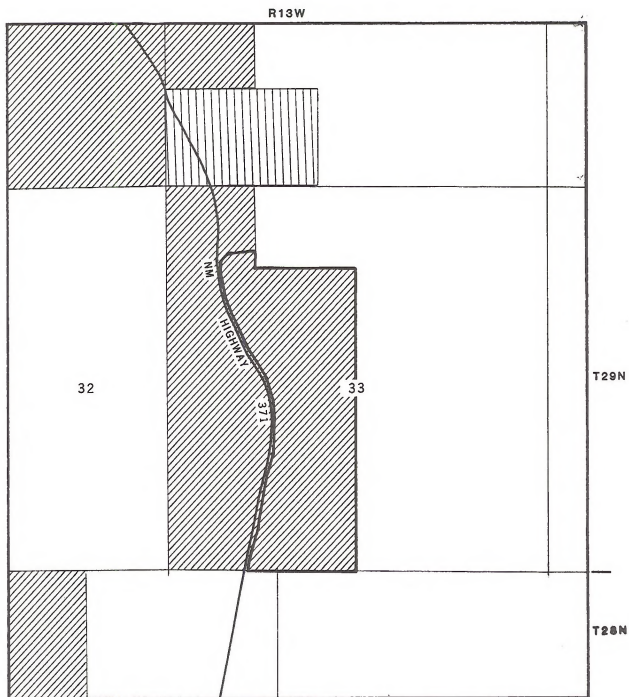
number of competing clubs combined with increased costs associated with permitting is suspected to have caused the decrease in permit applications and authorized events.

• MANAGEMENT GOALS:

The primary purpose for special management of this area is to reduce authorization paperwork and costs associated with permitting ORV competitive events. Management goals include minimizing user conflicts, promoting public safety and protecting resources.

• MANAGEMENT PRESCRIPTION:

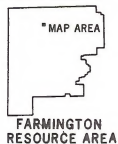
1. Complete "limited" ORV designation and implementation plan to restrict use during authorized events.
2. Designate as Special Recreation Management Area.
3. Prepare Recreation Area Management Plan.
4. Pursue Cooperative Management Agreement.
5. Apply VRM Class IV objectives.
6. Complete fencing, signing and other administrative projects such as information displays and parking facilities.



LEGEND

-  SMA BOUNDARY
-  BLM LAND
-  INDIAN LAND
-  STATE/ PRIVATE LAND

0 1/4 1/2 MILE
SCALE



MAP A1-2
HEAD CANYON ORV COMPETITION AREA

3. Simon Canyon Recreation Area

• GENERAL DESCRIPTION:

The Simon Canyon Recreation Area contains 3,811 acres of public lands, of which 3,491 acres are designated as an Area of Critical Environmental Concern. It is located approximately 25 miles east of Aztec and Bloomfield, San Juan County, New Mexico, on the San Juan River, two and three-quarter miles west of Navajo Dam.

Access to the general area is via U.S. Highways 64 and 550, State Highway 44, and State Roads 173 and 539. Access to the Recreation Area is provided by a two-mile long public road that joins State Road 173.

Simon Canyon is characterized by moderately steep to very steep, rough, broken, and hilly topography. The elevation of Simon Canyon varies from 5,800 feet at the bottom of the canyon to 6,275 feet at the top of the rim. A small intermittent stream flows north to south and then westerly down the middle of the canyon into the San Juan River.

Plant species are generally consistent with the Upper and Lower Sonoran Life Zone, except for those areas where surface water provides for a localized riparian plant community. The more common grasses are blue grama, western wheatgrass, galleta, ring muhly, and three-awns. Various cactus species are present, primarily in the bottom of the canyon. An even-age stand of cottonwood trees is found at the bottom of the canyon and along the river, while pinyon pine and juniper are found at the upper elevations with small, scattered patches of ponderosa pine and Douglas fir along the high canyon rims.

The canyon also provides habitat for a variety of birds and mammals, such as golden eagle, prairie fal-

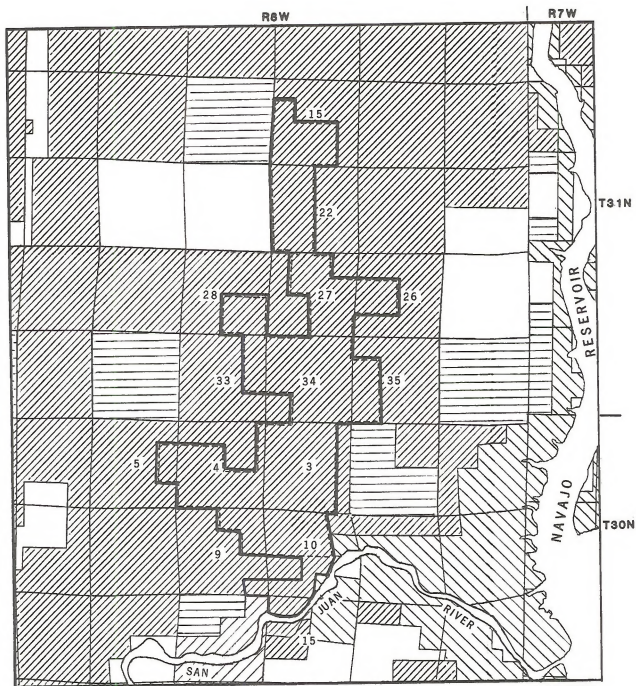
con, great horned owl, scrub jay, quail, rock wren, spotted ground squirrel, mountain cottontail, skunk, gray fox, porcupine, coyote, and beaver. The upper and middle portions of the canyon provide shelter for deer.

• MANAGEMENT GOALS:

A detailed account of management objectives can be found in the Simon Canyon Recreation Area Management Plan (USDI, BLM 1985e). The main objective for managing the ACEC is to preserve and protect the natural and cultural values of the area. The main objectives for the remainder of the Recreation Area are to reclaim disturbed areas and limit off-road vehicles to maintained roads.

• MANAGEMENT PRESCRIPTIONS:

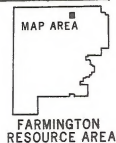
1. Complete "limited" ORV designation and implementation plan for the 320 acres in the SMA presently undesignated to restrict vehicles to maintained roads.
2. Continue implementation of the Recreation Area Management Plan and Project Plan.
3. Revise RAMP to include ACEC implementation.
4. Maintain Cooperative Management Agreement.
5. Apply special stipulations for mineral development.
6. Apply VRM Class II objectives.
7. Apply ROS semi-primitive non-motorized and motorized objectives.
8. Modify existing structures to blend with natural surroundings.
9. Apply limited/conditional wildfire suppression methods.



LEGEND

- SMA BOUNDARY
- - - ACEC BOUNDARY
- BLM LAND
- WITHDRAWN LAND
- OTHER FEDERAL LAND
- STATE LAND
- PRIVATE LAND

1 0 MILE
SCALE



MAP A1-3
SIMON CANYON RECREATION AREA

4. Angel Peak Recreation Area

• GENERAL DESCRIPTION:

The Angel Peak Recreation Area is a BLM-administered facility containing approximately 10,240 acres of public lands. Along the canyon rim, a maintained gravel road takes the visitor to 16 family camping and picnic units - each with a fireplace, table, and concrete pad. There are parking areas, trails, and fenced overlooks which help visitors enjoy the exceptional vistas of the area.

The Angel Peak Recreation Area is located approximately 35 miles southeast of Farmington, San Juan County, New Mexico. An easement has been acquired for public access to the area via State Highway 44 south from Bloomfield to a clearly-marked turn-off. The road extends from Highway 44 approximately 6.5 miles to the end of the Angel Peak Campground Loop. Vegetation in the area consists of sparse grass on the hills. Trees are few and twisted into gnarled shapes.

The Angel Peak ACEC (500 acres) includes a rare geologic feature which appears as the shape of an angel with one uplifted wing. It visually dominates the area known as the Kutz Canyon Badlands and is an unusual example of extreme erosional patterns. The canyon is a barren badland of blue and gray layered shale, carved through the centuries. The tip of Angel Peak is hard sandstone which stands alone as the land around was washed and blown away. Various other mineral deposits add reds, yellows, browns, and lavenders to the blue and gray

shale strata of the canyon walls. Visitors should observe that littering, wood cutting and discharging firearms are prohibited. A permit is required for campers staying 14 consecutive days or more.

• MANAGEMENT GOALS:

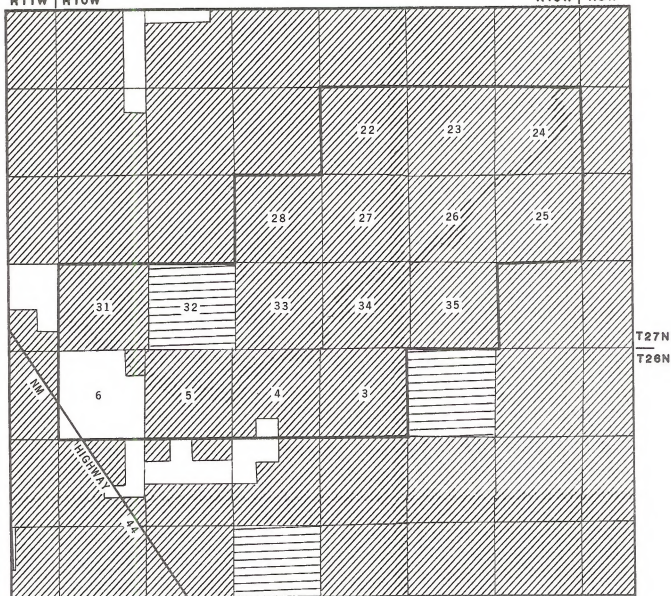
The protection and preservation of the natural, scenic, and outdoor recreation values is the primary management goal. A secondary goal is to provide the opportunity to engage in a wide variety of activities including camping, hiking, rockhounding, sightseeing, and horseback riding.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to designated maintained roads.
2. Withdraw ACEC from future mineral entry, close to mineral material disposal and oil and gas leasing.
3. Acquire non-BLM inholdings.
4. Close to wood cutting and gathering.
5. Designate as Special Recreation Management Area.
6. Prepare ACEC Recreation Area Management Plan.
7. Maintain existing facilities.
8. Extend Cooperative Management Agreement.
9. Apply VRM Class II objectives.
10. Apply ROS roaded natural objectives.

R11W | R10W

R10W | R9W

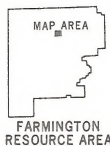


LEGEND

- SMA BOUNDARY
- BLM LAND
- STATE LAND
- PRIVATE LAND

0 1 2 MILES
SCALE

1
N



MAP A1-4
ANGEL PEAK RECREATION AREA

5. Carracas Mesa

• GENERAL DESCRIPTION:

This backcountry territory was recognized in the San Juan MFP (USDI, BLM 1979c) as a potential ACEC (3,000 acres). An enlarged area (7,000 acres) with the same name is proposed for SMA status.

The Carracas Mesa SMA is bordered by Navajo Reservoir to the west, the state of Colorado to the north, and Carson National Forest to the east. The SMA is somewhat removed with restricted access due to the surrounding land ownership, natural landscape and unmarked primitive routes. Public access is possible from the south.

A Recreation Opportunity Spectrum inventory describes outdoor recreation opportunities to be in the semi-primitive motorized class. Day hunting is the most common activity known to occur. Other activities may include backpacking, snowmobiling, vehicle trail riding, and nature appreciation.

Wildlife of the Carracas Mesa SMA is typical of the pinyon-juniper and ponderosa pine habitat. However, this area is special in the Resource Area because of its relatively undisturbed natural environment.

Wintering big game is the most visible wildlife use with elk numbering 150-300 animals in winter months and mule deer averaging 400 to 800 animals. Snows in Colorado drive animals down into this area beginning in late November. Mountain shrubs and grass, found in clearings, and seedings provide winter forage. This area has been recommended by the BLM and USFS as a trophy mule deer hunting unit.

Mountain lion numbers are unusually high in the Carracas Mesa SMA and adjoining areas of the Carson National Forest. Twelve lions were taken off the forest by hunters in the 1985 season.

• MANAGEMENT GOALS:

Primary administrative emphasis for management of the Carracas Mesa SMA will be for semi-primitive non-motorized and motorized outdoor recreation opportunities.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to designated routes and possible seasonal closures.

2. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.

3. Acquire easement and non-BLM inholdings.

4. Complete activity level planning.

5. Preclude ROW placement.

6. Close to wood cutting and gathering.

7. Apply limited/conditional wildfire suppression methods.

8. Apply VRM Class I objectives.

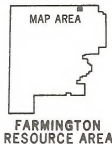
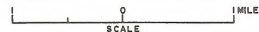
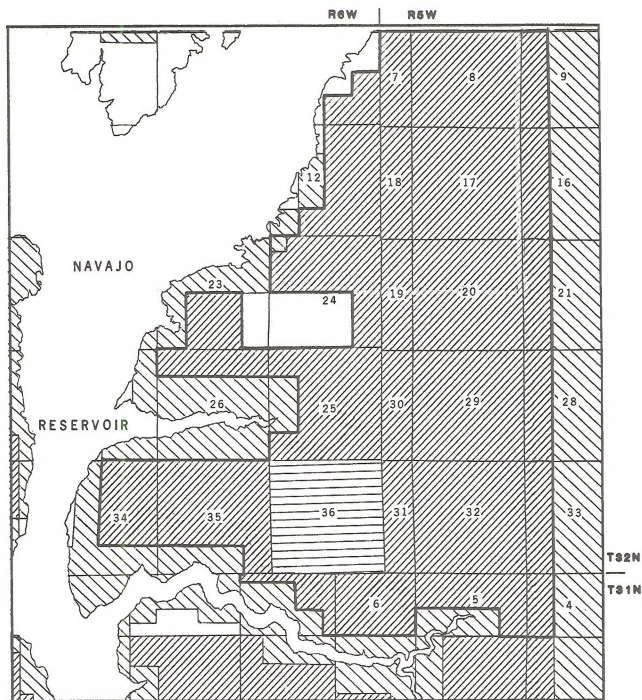
9. Apply ROS semi-primitive non-motorized and motorized objectives.

10. Require Visual, Wildlife, and Recreation program clearances for all surface disturbing activities.

11. Pursue Cooperative Management Agreement.

12. Fencing projects.

13. Sign placement.



MAP A1-5
CARRACAS MESA

6. Thomas Canyon

• GENERAL DESCRIPTION:

Thomas Canyon (formerly Jones Canyon) was identified as a potential ACEC (3,210 acres) in the San Juan Management Framework Plan (USDI, BLM 1979c). Critical resources were identified as natural and wildlife values. About 4,630 acres is being recommended as an SMA primarily to enhance and protect semi-primitive non-motorized types of outdoor recreation opportunities.

The area consists entirely of public lands. The area abuts the Colorado state border to the north and the Ute Mountain Indian Reservation to the west. Public access is provided by proceeding west from N.M. State Highway 170 along a system of unmarked graded and unmaintained routes.

The area is heavily forested (pinyon and juniper) with small pockets of ponderosa pine. The topography generally slopes from higher elevations in the west to lower elevations in the east with dissecting steep-sided canyons. The pinyon-juniper habitat site supports large herds of wintering mule deer.

Noticeable intrusions include a few primitive two-track routes and a gas well. Adjacent lands to the east and south are scattered with oil and gas wells, storage facilities and related roads.

Natural values within the area are considered important and somewhat rare in an otherwise developed region. The area lies approximately 14 air miles north of Farmington, N.M. and is the only relatively

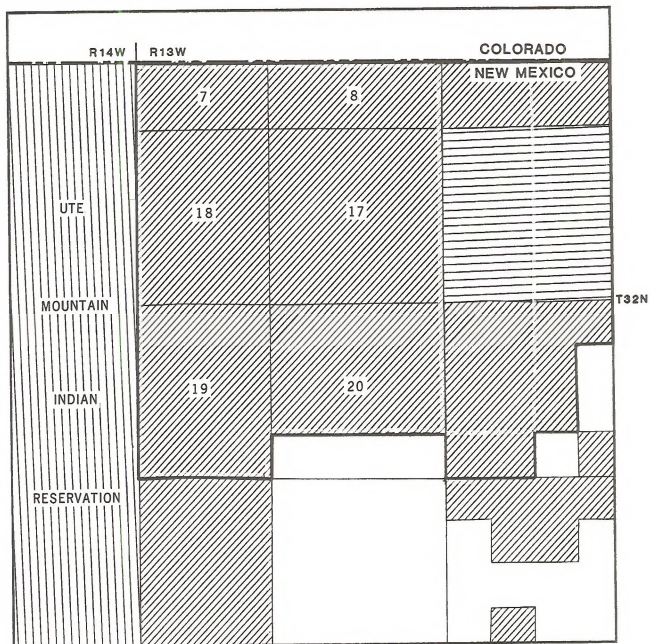
undisturbed natural environment of its size within a 30-mile radius of the city. Scenic values are associated with the botanical, wildlife, geological and natural features of the area. A Recreation Opportunity Spectrum (ROS) Inventory describes existing outdoor recreation supply as semi-primitive motorized.

• MANAGEMENT GOALS:

The primary administrative goal for Thomas Canyon includes management of the area for semi-primitive nonmotorized types of outdoor recreation.

• MANAGEMENT PRESCRIPTIONS:

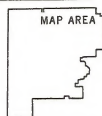
1. Complete "closed" ORV designation and implementation plan.
2. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.
3. Acquire easement and non-BLM inholdings.
4. Preclude ROW placement.
5. Close to wood cutting and gathering.
6. Apply limited/conditional wildfire suppression methods.
7. Apply VRM Class I objectives.
8. Apply ROS semi-primitive non-motorized objectives.
9. Require Visual, Cultural, Wildlife, and Recreation program clearances for all surface disturbing activities.
10. Pursue Cooperative Management Agreement.



- LEGEND**
- SMA BOUNDARY
 - ▨ BLM LAND
 - ▤ STATE LAND
 - ▥ INDIAN LAND
 - PRIVATE LAND

0 1/2 1 MILE
SCALE

↑
N



FARMINGTON
RESOURCE AREA

MAP A1-6
THOMAS CANYON

7. Negro Canyon

• GENERAL DESCRIPTION:

Negro Canyon was identified in the San Juan MFP (USDI, BLM 1979c) as a potential Area of Critical Environmental Concern (3,800 acres) because of its natural, scenic and wildlife values. About 1,600 acres are proposed for SMA status.

This area is located approximately seven air miles north of Navajo Dam and just west of the Los Pinos River in San Juan County, New Mexico. Access to the area is via N.M. State Route 511, 10 miles north of Navajo Dam traveling east along very rough and rugged unmarked primitive routes.

There is high potential for natural value enjoyment by the public as the area is noted for its wildlife and botanical sightseeing opportunities as well as being suited for recreation use by those wishing a relatively undisturbed backcountry experience. Backpacking, primitive camping, day hiking and nature viewing opportunities are prevalent in this woodland canyon area.

A Recreation Opportunity Spectrum Inventory identified outdoor recreation opportunities to be in the semi-primitive motorized class. Although no visitor use data are available, the area's close proximity to Navajo Reservoir, Simon Canyon

Recreation Area and state-administered campgrounds may indicate important recreation values.

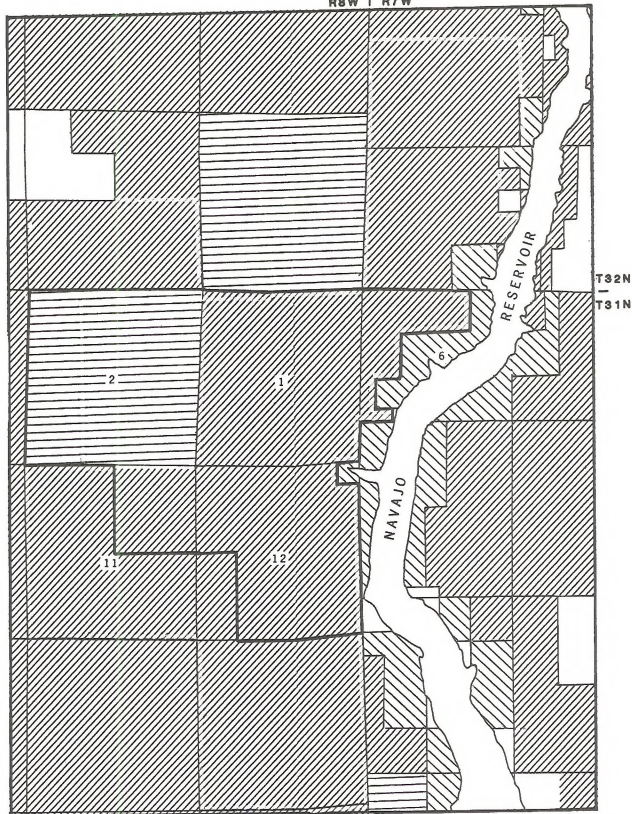
• MANAGEMENT GOALS:

The primary administrative goal for Negro Canyon includes management of the area for semi-primitive non-motorized types of outdoor recreation.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "closed" ORV designation and implementation plan.
2. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.
3. Acquire non-BLM inholdings.
4. Preclude ROW placement.
5. Close to wood cutting and gathering.
6. Apply limited/conditional wildfire suppression methods.
7. Apply VRM Class I objectives.
8. Apply ROS semi-primitive non-motorized objectives.
9. Require Visual, Cultural, Wildlife, and Recreation program clearances for all surface disturbing activities.
10. Pursue Cooperative Management Agreement.

R6W | R7W

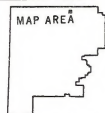


LEGEND

- SMA BOUNDARY
- BLM LAND
- OTHER FEDERAL LAND
- STATE LAND
- PRIVATE LAND



MAP A1-7
NEGRO CANYON



FARMINGTON
RESOURCE AREA

8. Glade Run Trail System

• GENERAL DESCRIPTION:

This SMA is a network of established roads and undesignated trails that contain a variety of outdoor recreation opportunity environments. Major access points from the communities of Farmington, Flora Vista, and Aztec link nearly 40 miles of well-developed routes.

Various portions of this network have been ridden by local ORV enthusiasts for over 30 years as well as recent use by bicyclists. A local group sponsors an annual bicycle rally that attracts cyclists from surrounding states which occurs on well established trails and existing roads.

In general, the trail system can be described as rolling terrain that peaks on ridge tops and bottoms out in valley floors. Surface soils vary from deep sands to rock to hard-packed gravel or maintained roads. Forested woodlands feature pinyon-juniper cover in some areas with sagebrush flats dominating other areas.

The sights and sounds one can expect to encounter vary from those found in an environment of paved roads, housing developments, power lines, moderate vehicular traffic, and other urban noises to areas natural in appearance with human-caused

modification subdued and blended with the natural landscape.

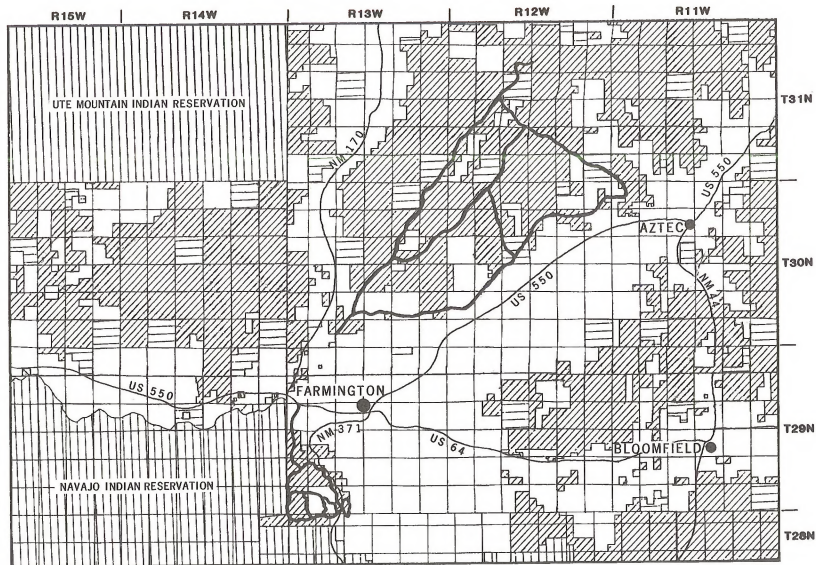
According to a Recreation Opportunity Spectrum (ROS) Inventory, the trail travels through the urban and rural ROS classes with the majority occurring in the roaded natural class.

• MANAGEMENT GOALS:

The Bureau of Land Management's primary role will be nonsupervisory in nature with trail administration designed for bicycles and small ORVs (e.g. three-wheelers, quads, and motorcycles). Diversity in trail surface, scenery, terrain, physical challenge, and personal risk will be maintained. Efforts will be made to ensure consistency and coordination with the city of Farmington and San Juan County River and open space planning. Potential exists for linking special management areas through linear corridors.

• MANAGEMENT PRESCRIPTIONS

1. Acquire easements.
2. Prepare project plan for trail development, maintenance, signing, fencing, and environmental awareness.
3. Pursue Cooperative Management Agreement.

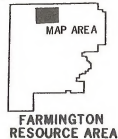


- LEGEND**
- TRAIL ROUTES
 - ▨ BLM LAND
 - ▩ OTHER FEDERAL LAND
 - ▤ INDIAN LAND
 - ▥ STATE LAND
 - ▦ PRIVATE LAND

1 0 1 2 3 4 MILES
SCALE



**MAP A1-8
GLADE RUN TRAIL SYSTEM**



9. Continental Divide Corridor

• GENERAL DESCRIPTION:

The National Parks and Recreation Act of Nov. 10, 1978, established the Continental Divide National Scenic Trail Corridor. According to the Continental Divide National Scenic Trail Comprehensive Plan prepared by the Forest Service, the BLM, and the National Park Service, the trail is a travel route which extends from Canada to Mexico. It will cross portions of 25 national forests, 3 national parks, 4 BLM districts and private land in Montana, Wyoming, Colorado and New Mexico and may utilize up to 1922 miles (62%) of existing trails and primitive roads, depending upon which routes are chosen.

The Continental Divide Scenic Trail Corridor traverses five life zones: the Lower Sonoran Zone, Upper Sonoran Zone, Transition zone, Boreal Zone and the Arctic-Alpine Zone and range in altitude from 2,500 to 14,000 feet. Each of these life zones feature variety in climate, topography, plants, birds and animals. Ranges of elevation for various life zones decrease with increases in latitude along the route.

Alternative routes have also been identified within the 50 mile wide corridor (see map). This will provide users the opportunity to view and experience a great diversity of natural characteristics, view and experience prehistoric and historic human use of resources, participate in trail related recreation opportunities, and provide recreation in harmony with the natural environment.

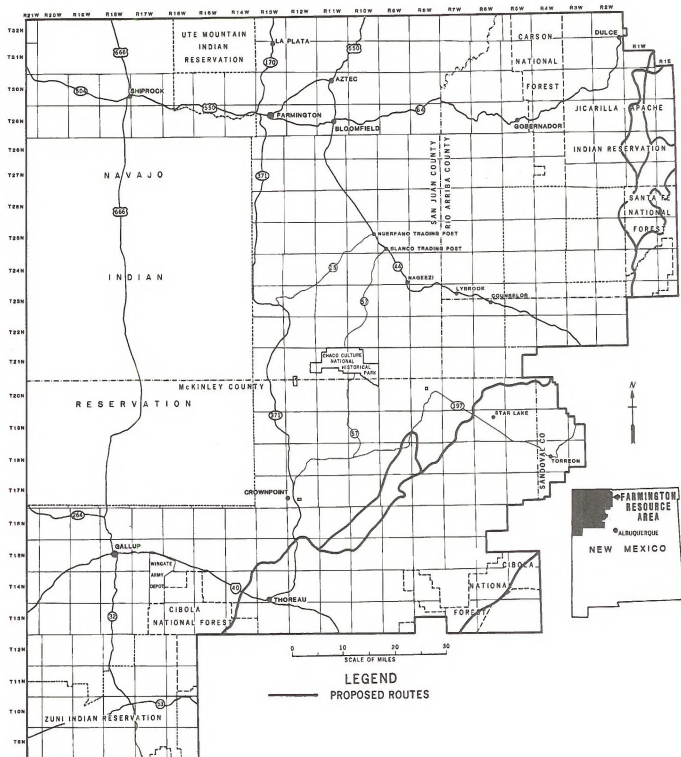
• MANAGEMENT GOALS:

The goal of the Continental Divide SMA is to facilitate and insure the coordinated location, development, operation and maintenance of a high quality travel route extending along or near the Continental Divide.

• MANAGEMENT PRESCRIPTION:

1. Implement decisions of the Continental Divide National Scenic Trail Comprehensive Plan, 1985.

FARMINGTON RESOURCE AREA



MAP A1-9
CONTINENTAL DIVIDE CORRIDOR

10. Bisti Wilderness

• GENERAL DESCRIPTION:

The Bisti Wilderness (3,946 acres) is located approximately 30 air miles south of Farmington and 15 miles northwest of Chaco Culture National Historical Park. The Bisti is a remote, desolate area of upland rolling topography and badlands terrain. The Fruitland Formation makes up the majority of lands in the Bisti and consists of interbedded shales, sandstones, and coals with a siltstone base. Weathering of the sandstones has resulted in many mushroom-shaped formations. The red coloration of the hills is a result of the shales being baked by high temperatures produced by the oxidation of the surrounding coals. The billowy mounds are the product of silts and clays that are rapidly eroding. The Kirtland Shale, which makes up the remaining portion of the badlands, contains colorful shales that cap some of the landforms.

Due in part to the soil composition and harsh environmental conditions, the badlands support few plant and animal species. The rugged, broken badlands dominating the Bisti provide an opportunity for an unusual type of primitive and unconfined recreation. Unique opportunities for hiking, horseback riding, photography, and geological/paleontological sightseeing exist (USDI, BLM 1979b). It is the unique nature of the badlands themselves that adds to recreational opportunities. People come from all over the region to see the Bisti, which has received media coverage through such nationally distributed magazines as *Living Wilderness* (Nothdurft 1981), *Sunset* (1981), *Frontier* (Cheasebro 1980), and *New Mexico* (1985). The area is currently withdrawn

from mineral entry and is "closed" to motorized/mechanized vehicle travel.

The Badlands ACEC contains 1,360 acres which was closed to vehicles and petrified wood collecting by Federal Register notice in 1978. It contains unusual topography "of compact, rolling hills, broken by narrow washes filled with mushroom formations and spires" (USDI, BLM, 1982a). Additionally, it contains abundant remains of petrified logs and fossils.

• MANAGEMENT GOALS:

The management goals for the Bisti Wilderness are to preserve the natural, solitude, and primitive recreation values.

• MANAGEMENT PRESCRIPTIONS:

1. Implement Wilderness Management Plan.
2. Withdraw Special Recreation Management Area status.
3. Incorporate ACEC activity plan into revisions of the Management Plan.
4. Intensively monitor topographic features along commonly travelled routes.
5. Photo-point monitor known paleontological sites.
6. Address potential effects of BLM acquisition of State Section 32.
7. Address effects of Navajo/Hopi Land Selection on planned parking facility.

11. De-na-zin Wilderness

• GENERAL DESCRIPTION:

The De-na-zin Wilderness is located approximately 30 air miles south-southeast of Farmington and 16 miles northwest of Chaco Culture National Historical Park. The Wilderness covers approximately 19,700 acres of public lands, 11 inholdings (1,652 acres) of Navajo Indian allotment lands, and 2,520 acres of state lands.

The eastern edge of De-na-zin harbors a pinyon-juniper community and is represented by yucca, Mormon tea, snakeweed, sagebrush, and assorted grasses and cacti, as well as pinyon and juniper trees. The rolling grasslands found in the north and northeast portions consist predominantly of Indian ricegrass and alkali sacaton. The badlands produce very little vegetation, due in part to poor soil conditions. Although few species of animal life inhabit the badlands, the pinyon-juniper and grassland communities are home to jays, ravens, scaled quail, rabbits, prairie dogs, coyotes, and badgers. Ferruginous hawks, golden eagles, and prairie falcons have been observed nesting in the area.

The opportunity for primitive and unconfined recreation is available throughout the majority of De-na-zin, derived primarily from the unusual nature of the topography and the unique scenery. Hiking, horseback riding, and photographic opportunities are concentrated in the badlands. The area is currently withdrawn from mineral entry and is "closed" to motorized/mechanized vehicle travel.

The Log Jam ACEC (320 acres) contains massive petrified logs attaining a diameter of up to six

feet and a length of 75 feet or more. The logs occur in the Ojo Alamo Sandstone and may have been deposited in a single large flood event. This area is unusual for the concentrated nature and size of the logs.

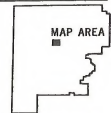
The Lost Pine ACEC (80 acres) contains approximately a dozen ponderosa pines representing a southwestern biogeographical anomaly. These trees, which contain three golden eagle nests, are remnants of a cooler climate which no longer exists. Golden eagle tree nests are not common in the Resource Area and the eagles are prone to abandon nests, if disturbed.

• MANAGEMENT GOALS:

The management goals for the De-na-zin Wilderness are to preserve the natural, solitude, and primitive recreation values.

• MANAGEMENT PRESCRIPTIONS:

1. Prepare and implement Wilderness Management Plan with ACEC considerations.
2. Withdraw Special Recreation Management Area status.
3. Intensive seasonal monitoring of raptor nesting territories.
4. Photo-point monitor known paleontological sites.
5. Apply special educational and awareness efforts to protect sensitive values.
6. Develop visitor access points and travel routes with precautions for protecting sensitive values.



FARMINGTON
RESOURCE AREA

MAP A1-11
DE-NA-ZIN WILDERNESS

12. Ah-shi-sle-pah Wilderness Study Area

• GENERAL DESCRIPTION:

The Ah-shi-sle-pah Wilderness Study Area (WSA) contains 6,563 acres of public land and is located in northwest New Mexico three miles north of Chaco Culture National Historical Park.

The geologic structures of the Ah-shi-sle-pah WSA consist of the Fruitland Formation and the Kirtland Shale, which contain alternating layers of sandstones and gray, tan and olive variegated shales (Kues et al. 1977). These soft, unconsolidated sediments have eroded into a variety of forms. Outcrops are exposed as badlands and are characterized by highly rugged terrain, including spires, towers, and mushroom formations. The visual qualities of the Ah-shi-sle-pah WSA result from the broken, coarse terrain and coloration. Browns, tans and grays are highlighted by maroon and purple banding.

The Ah-shi-sle-pah WSA contains geologic and paleontologic values that afford intrinsic educational and scenic opportunities. Fossils of dinosaurs, crocodiles, fish, turtles, and early mammals, as well as petrified wood can be found in the WSA (USD, BLM 1979b).

The majority of the unit is badlands, but Ah-shi-sle-pah Wash near the center of the WSA adds rolling topography dissected by intermittent drainages. The southern portion of the WSA and a thin band along the eastern border are open and rolling uplands, and support shortgrass and sagebrush vegetation.

Wildlife species that may be encountered in the WSA include coyotes, upland game species such as scaled quail and mourning doves, bull snakes and rattlesnakes, lizards, and cottontail rabbits. Ferruginous hawks periodically nest in the area.

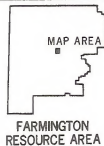
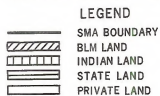
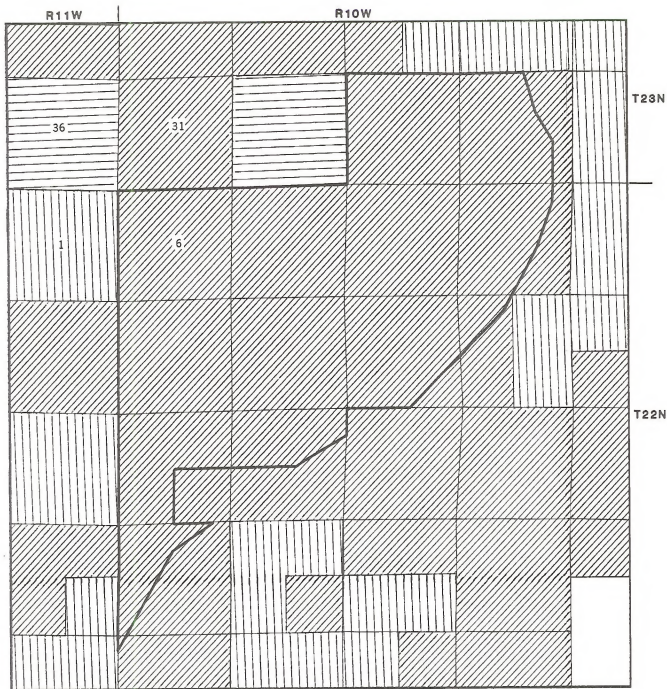
Opportunities for primitive and unconfined recreation within the Ah-shi-sle-pah WSA are related to its topography. The expansive rolling hills and the intricacy of the dissected badlands provide the WSA with varied opportunities for dispersed recreation. The badlands offer the opportunity for hiking, camping, horseback riding, sightseeing, and photography. The WSA is used primarily for day hiking, with some overnight use occurring. Sightseeing opportunities related to the inherent scenic, geologic, and paleontological values exist throughout the WSA. The area is currently "limited" to motorized/mechanized vehicle travel.

• MANAGEMENT GOALS:

The management goal for Ah-shi-sle-pah WSA is to preserve the natural, solitude, and primitive recreation values in the interim until the area is designated as Wilderness or is released from further wilderness consideration by Congress.

• MANAGEMENT PRESCRIPTIONS:

1. Prepare Preliminary Final EIS. Congress will make final decision on wilderness status.



MAP A1-12
AH-SHI-SLE-PAH WILDERNESS STUDY AREA

13. Navajo Refugee Sites (26)

• GENERAL DESCRIPTION:

A total of 38 sites in six ACECs and 20 SMAs will be managed under Special Management Area status. The sites are defensively positioned on mesa tops, on cliff faces, and on top of large boulders. Early investigators believed that these sites were built and occupied by Pueblo Indians fleeing the Spanish in the Rio Grande Valley. Tree-ring evidence dating the sites to the mid-1700s supports the idea that the sites were constructed by the Navajo for protection against attacks by Ute and Comanche groups. Although the sites post-dated the Pueblo Revolt, the Navajo were apparently influenced by Pueblo culture during this time. This is most strongly evidenced by the stone masonry structures exhibiting pueblo-style architecture, resulting in the descriptive term "pueblo" for this site type. They are also referred to as "Refugee" sites because of the earlier supposition that refugees from the Rio Grande Pueblos occupied the sites.

Site size varies from a single room to 40 rooms in multi-storied structures. Many of the sites have intact roofs and/or standing forked-stick hogans. Material remains indicate contact with a wide geographical area.

The majority of pueblitos are found in the Gobernador region east of Farmington, the area identified as the homeland of the Navajo People. The homeland, or Dinétah, covers approximately 1.5 million acres and includes much of the San Juan River drainage system. Topography is dominated by heavily dissected mesas, mesa benches, and valley bottoms.

(a) **THE SHEPARD SITE:** The FRA's southernmost pueblito has four rooms in a two-story structure with intact roofs. The number of corncobs found in the trash and in the floors and walls indicates that agriculture was a very important part of the local subsistence. Tree ring samples indicate construction around A.D. 1739. The site is located on a bench above a relatively wide valley with deep alluvial soils.

(b) **THE CROW CANYON DISTRICT** ACEC is listed on the National Register of Historic

Places and the area includes eight major ruins. Two of these, Shaft Ruin and Crow Canyon Ruin, have been stabilized. Several rock shelter storage bins and large rock art panels are located in the District. Pithouses dating to the Rosa Phase occupation (A.D. 700-900) are also located here. The area covers 4,380 acres.

(c) **THE HOODED FIREPLACE AND LARGO SCHOOL DISTRICT ACEC** is located on a bench above Largo Canyon and includes 320 acres. The Largo School pueblito is small, containing two or three rooms, while the Hooded Fireplace Site is larger, with 11 rooms. The latter site name is from a well-preserved fireplace found in the corner of one of the rooms. There are many small Navajo sites also included within the District boundaries.

(d) **TAPACITO AND SPLIT ROCK DISTRICT ACEC** includes approximately 240 acres. Tapacito consists of four well-preserved rooms and the remains of three others. The site was built in the A.D. 1690s making it one of the earliest recorded refugee sites. Split Rock is located less than one-half mile north of Tapacito on top of a large cracked boulder. There are four first-story rooms and there may have been a second story at one time.

(e) **FRANCES RUIN ACEC** is one of the largest known refugee sites with 40 rooms, a plaza, and a three-story tower. It was excavated in 1915 by Earl Morris with later investigations reported through the 1940s and into the 1970s. It is listed on the National Register of Historic Places. The ACEC covers 40 acres.

(f) **CHRISTMAS TREE RUIN ACEC** (40 acres) differs from most Navajo Refugee sites in that it is a single large room in a rock shelter, rather than a free-standing pueblo.

(g) **SIMON RUIN:** This site (40 acres) is located within the boundaries of the Simon Canyon Recreation Area and ACEC. It is the northwestmost recorded Gobernador Phase pueblito and consists of a one-room structure built on top of a large boulder.

(h) **SAN RAFAEL CANYON ACEC:** San Rafael Canyon is the largest (5,460 acres) of the Navajo Refugee ACECs. It contains three sites listed on the State Register of Cultural Properties: Old Fort, Kin Naa Daa, and Three Corn Ruins. Old Fort Ruin was built defensively with a high wall on two sides and a steep mesa edge protecting the remainder of the site. Forked stick hogans and masonry structures built in the pueblo style were contained inside the walls. Three Corn Ruin is a multiple room pueblo built on top of a large sandstone outcrop rising above a mesa finger. Kin Naa Daa (Maize House) is a small pueblo on a talus boulder with hand and footholds leading from the boulder to the pueblo entrances. Numerous other early Navajo sites have also been recorded on the mesa and mesa benches above the canyon.

(i) **ROMINE CANYON RUIN** (40 acres) is on a sandstone crag that protrudes west from a bench of a finger of Frances Mesa. The site consists of a single-story six-room pueblo with an entry way or courtyard, midden areas, and a defensive wall that isolates the pueblo from the rest of the bench.

(j) **PRIETA MESA SITE** (40 acres) is on the point of a bench of Prieta Mesa which drops sharply about 100 feet to the broad bench below. The site consists of a masonry-walled crag with a probable entryway. Three or four forked-stick or cribbed log hogans are enclosed by the wall. The entry appears to consist of a passage under a large horizontal timber into a narrow masonry room or corridor at the east end of the crag. The defensive wall differs from others because it has a number of large upright timbers set among the wall stones. A fourth hogan or sweatlodge lies on a small bench just northwest of the crag.

(k) **DELGADITO PUEBLITO** (40 acres) is built on an isolated boulder in a southfacing cul-de-sac of Delgadito Canyon. A three-room pueblo is built on a boulder top and a two-room masonry unit is located at the base of the boulder. The lower rooms probably provided access to the upper rooms. A series of hand and footholds are also carved in the boulder above the lower rooms.

(l) **CAGLE'S SITE** (40 acres) is in a small corner of a bench of Delgadito Mesa and sits on an isolated boulder. The pueblo contains either two rooms or one room with an entry passage.

(m) **ADAMS CANYON SITE** (40 acres) is located on the edge of the cliff forming the west side of Adams Canyon. The site commands a view down Adams Canyon and across Carrizo Canyon to Gomez Point Ruin. The site includes a three-room pueblo, a forked-stick hogan, a stone-based hogan, a burned rock pile, and a trash deposit. Anasazi rock art panels are located on the cliff wall below the site.

(n) **CASA MESA DIABLO** (40 acres) is on a bench near the head of one of the branches of Encierro Canyon. The site consists of a pueblo, two possible hogans, a mound of oxidized sandstone, and various artifact scatters and midden. Four rooms are built on the edge of the bench and one room is on an outcrop that is nearly two meters higher than the rest of the bench. The roof of a lower room was probably the means of access.

(o) **RINCON ROCKSHELTER** (40 acres) overlooks the head of a small tributary to Carrizo Canyon. The site consists of a walled rockshelter, masonry rooms on the cliff edge above, and midden debris on the bench below. The interior is heavily covered with mud mortar bearing many fingerprints. On the edge of the cliff are low walls outlining two rooms, one on either side of a crevice that may have been part of an entrance to the rockshelter.

(p) **HILL ROAD RUIN** is at the head of a small sandstone draw running north into Carrizo Canyon. The site is on a small boulder outcrop and consists of a pueblo, a possible hogan or windbreak, and surrounding trash deposits. The site covers 40 acres.

(q) **GOMEZ POINT SITE** (40 acres) is on a narrow promontory projecting east from the top of the mesa toward the junction of Gomez and Carrizo Canyons. The locations of the Adams Canyon site and the Gomez Canyon pueblo can be seen, but neither site can be distinguished with the naked eye. The site consists of three noncontiguous masonry structures and several midden areas enclosed by a defensive wall.

(r) **GOMEZ CANYON RUIN** (40 acres) is situated on a small sandstone point protruding from a bench of the mesa on the east side of Gomez Canyon. The site includes a pueblo, four forked-stick hogans, at least two midden areas, two piles of burned sandstone, and a few slab features.

(s) **ADOLFO CANYON SITE** (40 acres) is on a rock outcrop overlooking Adolfo Canyon from the west. Gould Pass Ruin, Gomez Canyon Site, and a large section of Adolfo Canyon can be seen from the site. The pueblo has a three-room, single-story pueblito, an extensive midden area, and six forked-stick hogans on the crest of the ridge. Two more hogans, two ramadas, and a pile of burned sandstone were also recorded on the bench below. Portions of the pueblito, hogans, and trash have been excavated.

(t) **UNREACHABLE ROCKSHELTER** consists of a walled rockshelter, a series of masonry wall remnants in alcoves and on ledges, artifact concentrations, and 13 forked-stick hogans on the mesa above. The site (60 acres) occupies a series of alcoves on the north side of Smith Canyon, a right bank tributary of Largo Canyon, and the mesa top above it.

(u) **COMPRESSOR STATION RUIN** (40 acres) sits on the second broad bench on the south side of Largo Canyon. The site consists of a pueblito on a free-standing sandstone outcrop, a burned rock pile, a slab-lined bin and forked-stick hogan, and an alcove containing a seep or spring. The pueblito has four ground floor rooms with evidence of a second story.

(v) **THE FOOTHOLD AND OVERLOOK RUINS DISTRICT** is on the east side of Palluche Canyon and includes 120 acres. Foothold Ruin sits on an isolated sandstone monolith with additional rooms at the base. Access up the monolith is by a set of footholds in the rockface. Roof beams and remnants of a hooded fireplace are found on the pueblito. The Overlook Site looks down on Foothold Ruin. It includes a pueblito, forked-stick hogans, a stone-based hogan, and other external features.

(w) **THE POINTED BUTTE RUIN** covers 40 acres and occupies the top of a steep-sided isolated butte and the surrounding area. The site consists of the remains of about three rooms on the butte, three forked hogans south of it, and substantial areas of trash surrounding the pueblito and hogans. The most intact pueblito walls are segments that extend downward into crevices in the butte. Access to the butte was apparently by means of a masonry entryway and natural rock passage on the east side of the butte.

(x) **THE RINCON LARGO DISTRICT** includes two pueblitos and covers 180 acres. The

Tower of The Standing God is on a bench on the north side of the mesa dividing Johnson Canyon from Rincon Largo. Masonry rooms are built next to three boulders and a tower may have been built on top of one of the boulders. A Ye'ii figure has been incised into one of the rocks. Rincon Largo Ruin and a third pueblito are visible from this site. Rincon Largo Ruin sits on a sandstone crag and two stone circles are located downslope to the northeast.

(y) **KIN YAZHI (LITTLE HOUSE)** sits on the eastern spur of a narrow mesa that separates Rockhouse Canyon from Rincon Largo and includes 40 acres. It commands a view up Largo Canyon for about six miles, down Largo for about a mile, and up Rincon Largo for about two miles. The structure has a north-facing doorway narrowed by a masonry pillar and contains evidence of a corner fireplace.

(z) **CANYON VIEW RUIN** covers 40 acres. The site contains a two room pueblito with a third room added on as an entry. This structure sits on an elevated sandstone outcrop and has an excellent view up and down Largo Canyon as well as up Rincon Largo. The intact walls stand up to six feet in height and one room has intact roof elements. Two hogans and two trash middens are associated with the pueblito and are located underneath the rubble at the base of the outcrop.

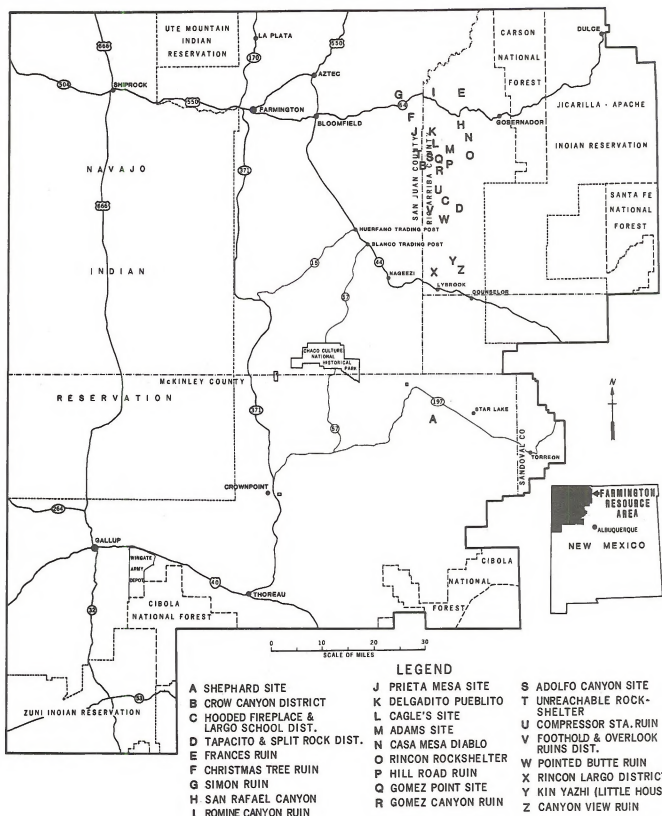
• MANAGEMENT GOALS:

The management goal for the Navajo Refugee sites will be to preserve cultural and recreational values.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designations and implementation plans to restrict vehicles to designated roads and trails.
2. Acquire inholdings.
3. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.
4. Preclude ROW placement.
5. Close to wood cutting and gathering.
6. Document site conditions.
7. Acquire easements where needed.
8. Prepare recommendations for stabilization.
9. Complete and implement draft Cooperative Management Agreement for site monitoring.
10. Complete Historic American Building Survey/Historic American Engineering Record documentation.

FARMINGTON RESOURCE AREA



MAP A1-13
NAVAJO REFUGEE SITES

14. Native American Traditional Use & Sacred Areas (4)

- GENERAL DESCRIPTION:

There has been an increasing interest in the recognition and protection of areas important to Native Americans. This stems from passage of the American Indian Religious Freedom Act and the completion of regulations for enforcement of the Archeological Resources Protection Act (ARPA).

The FRA has been occupied by various Native American groups for the last 10,000 years. The Ute, Jicarilla Apache, and Navajo tribes all have recent ties to the area, while connections with the Zuni, Hopi, and Rio Grande pueblos are more ephemeral.

Designation of the following four areas as SMAs is only the first step in recognition of Native American values and it is expected that additional areas will be added to this SMA group in the future. These areas are only specific places of concern at this time.

GOBERNADOR KNOB (40 acres), according to tradition, is the area where the first four Navajo Clans arrived on their journey from the west and where the Holy People found Changing Woman, one of the most important Navajo deities. It is one of the few well-defined sacred areas in the Dinétah or Navajo Homeland.

THE TANNER LAKE BATTLEFIELD (80 acres) has been described as the site of a raid or battle that resulted in the deaths of many Navajos. Oral history gathered by York (1984) documents the incident as occurring sometime after the Navajo return from Fort Sumner in 1868. The area was occupied by Navajos who were attacked by rifle-carrying Jicarilla Apaches who burned the settlement and left the area with captives. The deceased Navajos were scalped and left unburied. Another account identifies the raiders as Ute Indians and places the attack prior to the Fort Sumner period. No surficial evidence remains but the site is significant because of the deaths that occurred there. The Navajo also believe

that this place is dangerous and should be avoided (York 1984).

SALT POINT ACEC (Ashiihnaa'ah, Salt Going Down Point, 640 acres) is traditionally associated with the Navajo Salt Woman. Other than this, little is known about the area. It is identified by Van Valkenburgh (1974) as a Navajo sacred place.

HUERFANO MESA (3,670 acres) is a large isolated mesa which dominates the landscape south of the San Juan River and can be seen from the Chuska Mountains 50 miles to the west. It is a sacred mountain in Navajo tradition. It is mentioned in the Blessingway ceremony and was the scene of first girl's first adolescence ceremony for Changing Woman and the point of Changing Woman's departure for the Western Sea. It is used for gathering plant and herbal medicines (Van Valkenburgh 1974).

- MANAGEMENT GOALS:

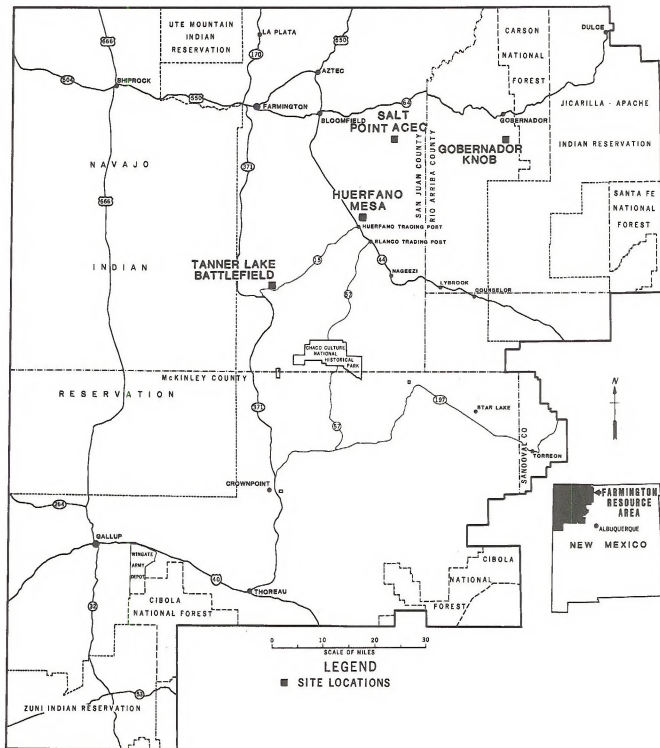
The management goal for this category of sites is protection of cultural values.

- MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designations and implementation plans to restrict vehicles to existing roads and trails.
2. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.
3. Preclude ROW placement.
4. Develop programmatic MOU with Native American groups to define consultation procedure.
5. Conduct ethnographic and literature search to develop a data base identifying specific areas of concern for management as SMAs.

NOTE: It is expected that additional areas of importance to Native Americans will be identified throughout the Resource Area as a result of objectives 4 & 5 above.

FARMINGTON RESOURCE AREA



MAP A1-14
 NATIVE AMERICAN TRADITIONAL USE AND SACRED AREAS

15. East Side Rincon Site

• GENERAL DESCRIPTION:

The length of the La Plata Valley in New Mexico is about 20 miles from the Colorado border to its confluence with the San Juan River west of Farmington. Elevations in the valley range from 5200 to 6000 feet. Vegetation is dominated by piñon pine and juniper with sagebrush and various other shrubs and grasses.

The East Side Rincon Site (100 acres) is located on a narrow riverine terrace on the east side of the La Plata River. The river channel cuts into the east bank of the site, creating a steep-banked terrace edge which rises 45 to 100 meters above the floodplain. A deeply entrenched arroyo also bisects portions of the site. Cultural features are exposed in the banks of the arroyo and in the east bank of the La Plata River.

The site contains evidence of an Archaic occupation as well as Basketmaker and Pueblo components. The Basketmaker III - Pueblo I occupation appears the most expansive, including at least six pithouses, several storage cists, and a trash midden.

The site was first recorded in 1935, with additional recordation in 1964 and complete documentation in 1983 and 1984. The latter work resulted in listing the site on the National Register of Historic Places.

The site is significant because little is known about the Archaic and Basketmaker use of the La Plata Valley and it represents one of the few Basketmaker villages documented in this area.

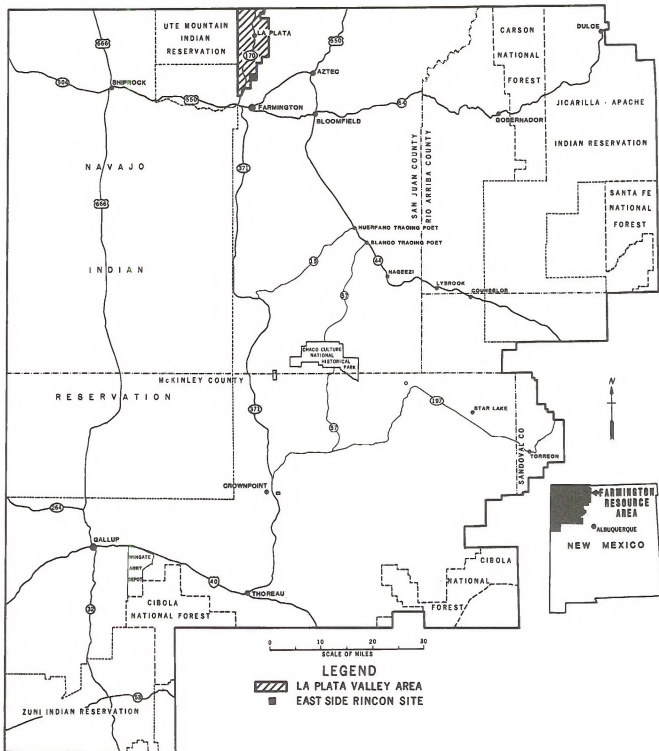
• MANAGEMENT GOALS:

The management goal is to protect cultural resource values.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to designated roads and trails.
2. No surface occupancy.
3. Acquire easement.
4. Close to wood cutting and gathering.
5. Preclude ROW placement.
6. Activate patrol and surveillance.
7. Aerial photo documentation.
8. Establish erosion monitoring program.
9. Establish yearly documentation and/or excavation of exposed features.
10. Yearly submittal of salvaged data for analysis (pollen, float, dendro, radiocarbon).
11. Curation of remaining artifacts for analysis.
12. Biannual evaluation of applicable erosion control measures.

FARMINGTON RESOURCE AREA



MAP A1-15
EAST SIDE RINCON SITE

16. Chaco Outliers Group (8)

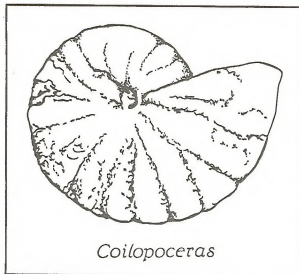
• GENERAL DESCRIPTION:

The SMA includes eight sites recognized as Chaco Outliers. The sites are widely distributed throughout the Resource Area and are found in a variety of environmental settings. All have evidence of interaction with Chaco Canyon during the Pueblo II-III periods of occupation. Seven of the eight sites are protected under PL 96-550.

KIN NIZHONI COMMUNITY – The Kin Nizhoni Community covers approximately 800 acres of private and BLM land and is located southeast of Ambrosia Lake. The community consists of 88 sites containing 104 structures with over 30 rooms. The community clusters around a low mesa and is surrounded by marshlands. The two major structures are Kin Nizhoni, a rectangular ruin containing 14 rooms and two kivas, and Lower Kin Nizhoni, which contains three rooms, a kiva, and an enclosed plaza. It is thought that Kin Nizhoni and Lower Kin Nizhoni were linked by a roadway and that Kin Nizhoni was the terminus of a major Chacoan roadway. The community appears to have been occupied between A.D. 950 and A.D. 1100.

• MANAGEMENT GOALS:

The management goal for the Kin Nizhoni Community will be the protection of cultural values.



Coilopoceras

• MANAGEMENT PRESCRIPTIONS:

1. Continue implementation of existing CRMP.
2. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.
3. Acquire easement.
4. Informed placement of rights-of-way.
5. Pursue Cooperative Management Agreement.
6. Continue photo, erosion monitoring, patrol and surveillance programs.
7. Complete cadastral survey and fencing.
8. Complete National Register nomination.
9. Stabilize and backfill deteriorated parts of the site.
10. Complete Class III inventory.
11. Complete prehistoric roads survey.
12. Complete file search to consolidate all information about the site in single repository (i.e. BLM-FRA).
13. Withdraw or reschedule grazing rights.

PIERRE'S SITE ACEC – Pierre's Site ACEC is a 440-acre parcel 10 miles north of Chaco Culture National Historical Park and 11.5 miles southwest of Blanco Trading Post. The community includes three Chacoan structures, nine small structures, and nine special use areas, all dating from A.D. 900 - 1150. Two of the Chacoan structures are built on top of a prominent butte while the third and largest is built on alluvial deposits. The prehistoric "Great North Road" passes through the site adjacent to the largest structure. A total of 45 rooms and six kivas have been identified in these Chacoan structures while the smaller sites each include 5 to 10 rooms with an associated kiva.

• MANAGEMENT GOALS:

The management goal for Pierre's site will be to protect cultural resource values and enhance these values for visitor interpretation.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads.
2. Withdraw from future mineral entry and close to mineral material disposal and apply a no surface occupancy stipulation to oil and gas leases.

3. Complete and implement CRMP as called for in the Chacoan Community Interim Management Plan (1980).

4. Informed placement of rights-of-way.

5. Continue photo, erosion monitoring, patrol, and surveillance programs.

6. Complete cadastral survey.

7. Close to grazing, close to wood cutting and gathering.

8. Stabilize and backfill areas.

9. Complete National Register nomination.

10. Complete file search to consolidate all information about the site in a single repository (i.e. BLM-FRA).

11. Complete Class III inventory.

HALFWAY HOUSE ACEC – Halfway House is a one-story, rectangular masonry structure estimated to contain 12 rooms. It is located on a low rise near Gallegos Wash. Segments of what may have been a major Chacoan road have been identified on the east and south sides of the structure. Core and veneer masonry and ceramics on the site indicate an occupation between A.D. 975 and A.D. 1150. The site includes 40 acres.

MANAGEMENT GOALS:

The management goal for Halfway House will be to protect cultural resource values.

MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads.

2. Withdraw from mineral sales.

3. Acquire easement.

4. Continue implementation of existing CRMP.

5. Informed placement of rights-of-way.

6. Close to wood cutting and gathering.

7. Close to land treatment projects.

8. Continue photo-monitoring, patrol and surveillance programs.

9. Backfill vandalized areas.

10. Complete cadastral survey.

11. Improve existing fencing.

12. Complete file search to consolidate all information about the site in a single repository (i.e. BLM-FRA).

TWIN ANGELS ACEC – Twin Angels consists of four separate structures located on a steep cliff edge overlooking Kutz Canyon. The largest structure is a one-story rectangular room

block containing 17 to 19 rooms and two kivas. Immediately to the southwest is a U-shaped rubble mound which may be a shrine. A low square rubble mound is located northwest of the larger room block. The core and veneer masonry and ceramics found at the site indicate an occupation between A.D. 1000 and A.D. 1250.

MANAGEMENT GOALS:

The management goal for the Twin Angels Community will be to protect cultural resource values.

MANAGEMENT PRESCRIPTIONS:

1. Close to mineral material disposal.

2. Acquire easement.

3. Continue implementation of existing CRMP.

4. Informed placement of rights-of-way.

5. Close to wood cutting and gathering.

6. Close to land treatment projects.

7. Withdraw from grazing.

8. Continue photo-monitoring, erosion monitoring, patrol and surveillance programs.

9. Complete cadastral survey.

10. Complete fencing project.

11. Stabilize and backfill areas.

12. Complete Class III inventory.

13. Complete file search to consolidate all information about the site in a single repository (i.e. BLM-FRA).

JACQUES SITE – The Jacques Site is located on an alluvial terrace south of the San Juan River and covers 40 acres of private surface. Included within the area is a one-story, L-shaped Chacoan structure with an estimated 25 rooms, an open plaza, and a kiva. Exposed masonry walls reveal Chacoan building attributes and large rooms. At least three smaller structures are found near the Chacoan structure. The occupation appears to have occurred from about A.D. 1075 to the 1200s. The site is listed on the National Register of Historic Places.

MANAGEMENT GOALS:

The management goal for the Jacques Site will be to protect cultural resource values.

MANAGEMENT PRESCRIPTIONS:

1. Implement Cooperative Management Agreement.

2. Prepare Cultural Resource Management Plan.

ANDREWS RANCH COMMUNITY - The Andrews Ranch Community is located on the north side of the Red Mesa Valley and east of Casamero Draw. There are at least 21 structures containing approximately 106 rooms and three isolated great kivas. A large multi-story Chacoan structure with 14 rooms and five kivas has also been recorded. Jacal and masonry structures indicated the site was well established by A.D. 800 with the occupation lasting until about A.D. 1050. The site covers approximately 950 acres of private land.

• MANAGEMENT GOALS:

The management goal for the Andrews Ranch Community will be to protect cultural resource values.

• MANAGEMENT PRESCRIPTIONS:

1. Prepare a Cultural Resource Management Plan.
2. Pursue Cooperative Management Agreement with the surface owner.

HOLMES GROUP - The Holmes Group is a 100-acre archeological community located 15 miles north of Farmington, New Mexico. At one time, this community had National Landmark Status but its status was revoked because of the extensive vandalism that has taken place. The site has recently been included in a nomination to the National Register. The large outlier community contains the remains of at least 30 small houses, one L-shaped Chacoan structure with a plaza open to the southeast, a second large structure thought to be Chacoan because of its size, and one isolated great kiva. The small houses, Chacoan structures, and associated refuse mounds are in close proximity with cultural material covering most of the SMA. The area selected for consideration includes approximately 250 rooms and 60 kivas. Ceramics on the site range from Late Pueblo II through Late Pueblo III, indicating occupation and use from about A.D. 975 to A.D. 1300.

• MANAGEMENT GOALS:

The management goal for the Holmes Group will be to protect the cultural resource values.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads and trails.

2. Withdraw from future mineral entry.
3. Acquire easement and non-BLM inholdings.
5. Preclude ROW placement.
6. Complete fencing project.
7. Formalize patrol and surveillance program.
8. Develop Cooperative Management Agreement.
9. Evaluate for inclusion in PL 96-550.
10. Withdraw from grazing.

CASAMERO COMMUNITY ACEC - The Casamero Community includes a large multi-story pueblo with 20 ground-floor rooms and one kiva. A second kiva may be located in the plaza associated with this structure. A great kiva is located 200 feet south of the pueblo and 24 additional structures have been recorded in the surrounding area. The site was excavated in 1966 and 1967 and stabilized by the Bureau of Land Management in 1975, 1976, and 1986. The community was established around A.D. 900 and abandoned by A.D. 1125. The community is situated at the base of Ojo Tecolote Mesa and overlooks Casamero Draw. The Bureau of Land Management administers all 160 acres within the boundaries of the SMA.

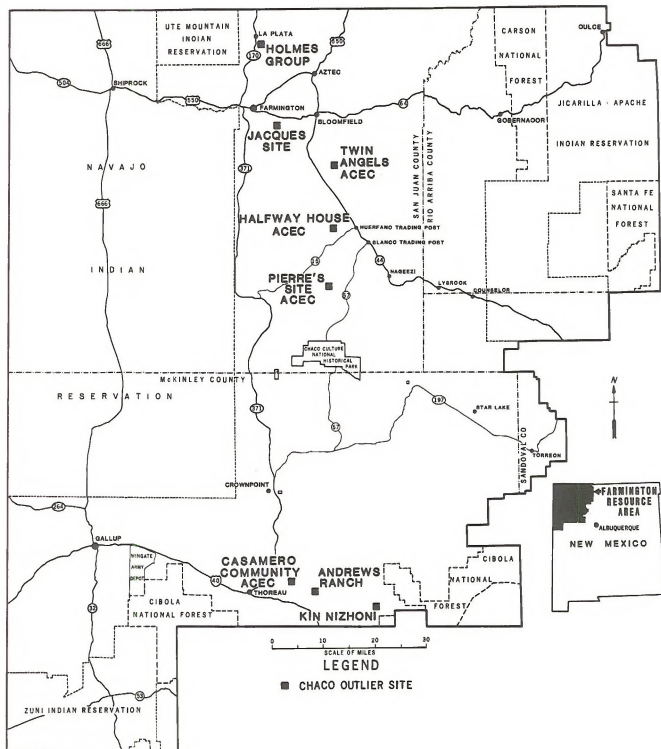
• MANAGEMENT GOALS:

The management goal for the Casamero Community will be the protection of cultural and recreation values.

• MANAGEMENT PRESCRIPTIONS:

1. Continue implementation of existing CRMP.
2. Authorize existing ROW.
3. Withdraw from grazing.
4. Close to wood cutting and gathering.
5. Pursue Cooperative Management Agreement.
6. Complete Class III inventory.
7. Evaluate for inclusion in PL 96-550.
8. Continue photo-monitoring, patrol and surveillance, cattle and erosion monitoring programs.
9. Fence boundary.
10. Stabilize sites.
11. Develop visitor-use facilities.
12. Complete aerial photo documentation and photogrammetric contour maps.
13. Complete National Register nomination.
14. Complete prehistoric roads survey.

FARMINGTON RESOURCE AREA



MAP A1-16
CHACO OUTLIERS GROUP

17. Chacra Mesa Complex

• GENERAL DESCRIPTION:

Chacra Mesa is 34 miles long, extending from Chaco Canyon in the northwest to Torreon in the southeast and cutting across the northeastern corner of McKinley County, New Mexico. The Chacra Mesa Complex is situated in the approximate middle of the mesa, covering 11,330 total acres. Approximately 6,370 public acres within the complex would be designated as an ACEC.

Chacra Mesa is long and narrow with the southern side defined by a sheer escarpment averaging 500 feet from valley bottom to mesa top. The mesa slopes downward from south to north and is broken by a series of long projections and by many deep canyons. Elevation averages about 6500 feet. Vegetation is primarily within the Upper Sonoran life zone, including piñon pine, juniper, sagebrush, and a variety of other shrubs and grasses. Some ponderosa pine is found in the higher elevations.

The Complex includes 80-100 cultural sites, 40 of which have been listed on the National Register of Historic Places (NRHP). The area was occupied during the late Pueblo III period, dating from A.D. 1175 to 1274. Almost all sites are one-story structures with room counts ranging from two rooms and one kiva to 50-75 ground floor rooms and 13 kivas. In addition to the room block and kiva(s), each site also has a well-defined plaza forming a semi-circle beyond the kiva and surrounded by construction rubble mixed with ceramics, chipped stone, and ash and charcoal deposits.

There has been very little vandalism in the area and none of the disturbance appears to be recent.

Most structures have been reduced to rubble mounds, but these sites are in excellent condition and some have standing walls up to six feet in height. Generally, site condition appears to be environmentally stable and archeological data potential in the area is extremely high.

Four prehistoric road segments have been identified on aerial photographs and portions of these have been verified on the ground. These roads are assumed to date to the Pueblo III period because of their association with datable sites.

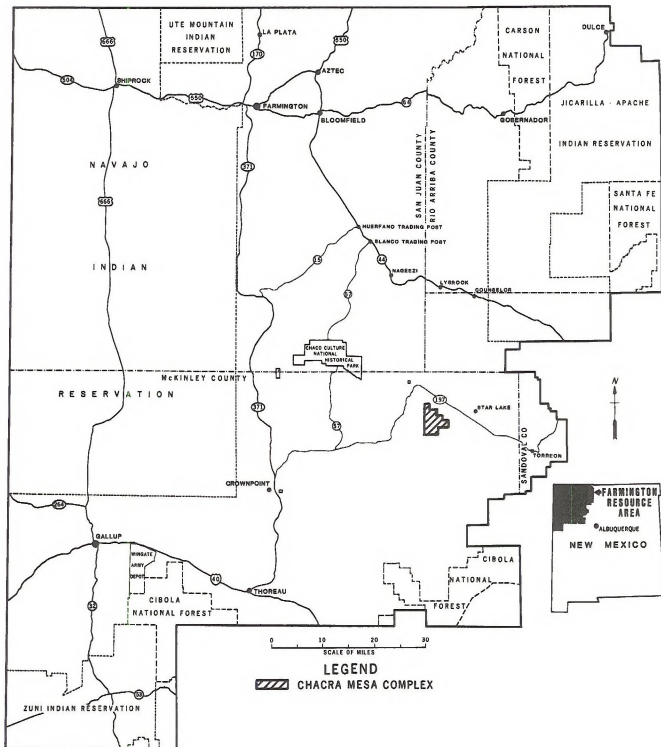
• MANAGEMENT GOALS:

Management emphasis for the Chacra Mesa Complex ACEC will be the protection of cultural values and visual resource values.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation to designated roads and trails and implementation plan.
2. Withdraw from future mineral entry and close to mineral material disposal.
3. Acquire easement and non-BLM inholdings and cooperative management agreements.
4. Prepare Cultural Resource Management Plan with ACEC consideration.
5. Complete Class II inventory.
6. Nominate additional sites to the National Register.
7. Repair stabilized walls at sites CM 100 and 101.
8. Apply limited/conditional wildfire suppression methods.
9. Apply VRM Class II objectives.

FARMINGTON RESOURCE AREA



MAP A1-17
CHACRA MESA COMPLEX

18. Farmer's Arroyo Site

• GENERAL DESCRIPTION:

The Farmer's Arroyo Site (40 acres) is located on a high cobble ridge looking out over the Animas River Valley. Badlands lie to the east and rolling mesas cut by arroyos and shallow drainages lie to the west. The site appears to have been an adobe structure. There is no rubble to indicate the presence of masonry or cobble walls and the artifact scatter is minimal, probably because of collection by hikers and ORV users. Recent (spring 1987) aerial photography clearly shows a U-shaped structure indicated by changes in surface elevations and vegetative cover. It is estimated that the structure contains 12 to 16 ground floor rooms with a possible second story. The few ceramics remaining at the site date the occupation to the Pueblo III period, Mesa Verde phase. A very large kiva, probably used in conjunction with the adobe structure, is 400 feet to the southwest at the base of the ridge and a cobble walled pueblo with four rooms is located about a quarter mile further south. The adobe construction, topographic setting, and proximity to Aztec Ruins make this site a unique

and significant resource requiring special management attention.

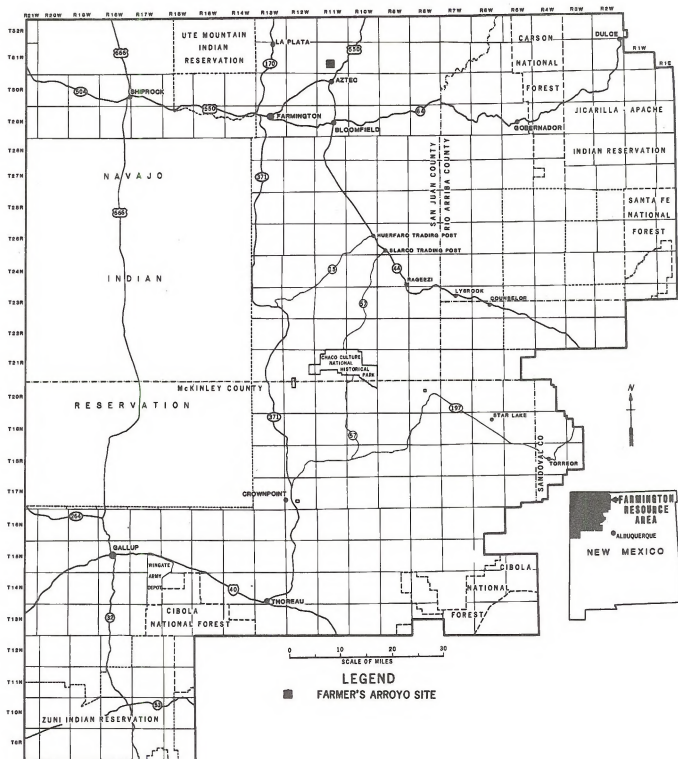
• MANAGEMENT GOALS:

The management goal is to protect cultural resource values.

• MANAGEMENT PRESCRIPTIONS

1. Complete "closed" ORV designation and implementation plan.
2. No surface occupancy.
3. Acquire easement.
4. Preclude ROW placement.
5. Close to wood cutting and gathering.
6. Complete a Class III inventory.
7. Complete site documentation and site records.
8. Prepare a Cooperative Management Agreement with the National Park Service and/or adjacent landowner.
9. Acquire kiva on private land.

FARMINGTON RESOURCE AREA



MAP A1-18
FARMER'S ARROYO SITE

19. Laguna Seca Mesa

• GENERAL DESCRIPTION:

The Laguna Seca Mesa SMA covers approximately 2,400 acres of woodland and ponderosa pine forest. It is located about three miles southeast of the Jicarilla Ranger Station (USFS) on a large sandstone mesa. This mesa adjoins the larger mesa formation to the east on the Carson National Forest.

The Laguna Seca Mesa and the vegetation it supports is very important in that it is practically the only unit in the Farmington RA that contains manageable tracts of ponderosa pine forest that have multiple use values.

The mesa is fairly rough and has numerous side canyons that support the forest and woodland species. The elevation (7,500 feet) and climate are favorable for woodland and forest management. On the north and east exposures, the sites are ideal for ponderosa pine forest. The piñon-juniper woodlands do equally well on the same site as the ponderosa pine and also thrive on the drier, more exposed sites as well.

Ponderosa pine forests on the SMA contain mature and overmature individual trees, but many younger age classes are found throughout the stands, particularly on the cut-over areas. At least two timber sales (commercial sawlogs) have been conducted on this mesa (during the 1960s) with only selected trees designated to be harvested. After soil disturbance occurred (a normal occurrence after a timber sale), the sites were favorable for natural regeneration. In most of the cutover areas this natural regeneration occurred successfully. Other disturban-

ces include firewood and post sales in several locations.

The SMA is within a productive wildlife area. The diverse mixture of forest, woodland, open parks, oakbrush, and sandstone bluffs provide excellent habitat for many wildlife species. Other uses include livestock grazing, mineral development, fuelwood and post sales, recreation, and hunting.

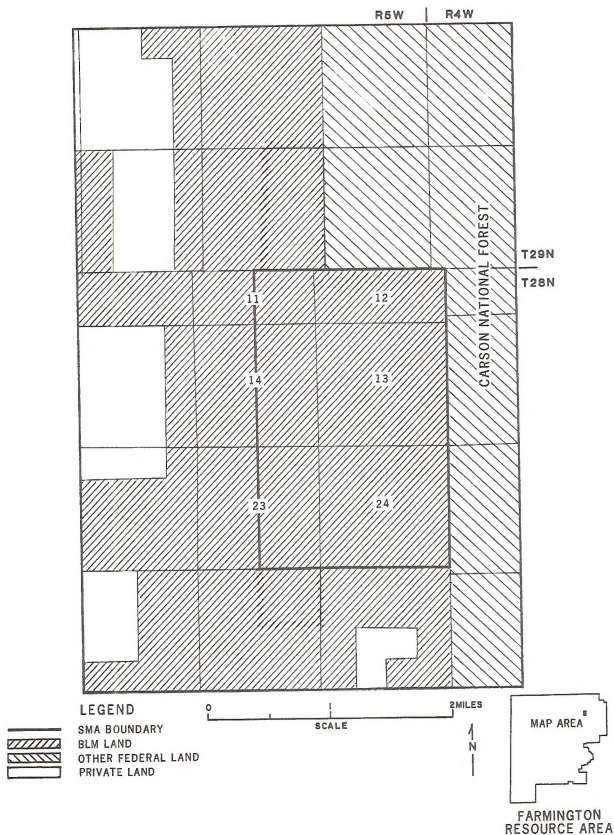
• MANAGEMENT GOALS:

Management of the Laguna Seca Mesa SMA will emphasize forest development as the major goal. Individual stands within the forest require specific treatments in order to attain this goal. This is called "stand prescription." Some stands may only require site preparation and reforestation (planting) to achieve optimum growing condition. Other stands may require a "shelterwood cut," accomplished through a timber sale, to attain a prescribed objective.

Other goals to be considered will be the maintenance or improvement of the wildlife habitat and recreational opportunities.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "open" ORV designation and implementation plan.
2. Acquire easement.
3. Conduct limited inventory.
4. Prepare type maps for timber and woodland.
5. Determine individual stand prescriptions.
6. Prepare and implement activity plan.



20. Beechatuda Tongue

• GENERAL DESCRIPTION:

The Beechatuda Tongue of the Cliff House Sandstone is a rock stratigraphic unit mapped in, and named for, Beechatuda Draw in T.30N., R.15W., Section 5; NW/4. This area (80 acres) is the type locality for the unit. As such, it is of interest to scientists and educators as a site for comparison and study of the unit, and for possible further refinement of the stratigraphic nomenclature. It is important that the unit be preserved intact to allow these studies and comparisons.

• MANAGEMENT GOALS:

The Beechatuda Tongue SMA will be managed to protect scientific study values.

• MANAGEMENT PRESCRIPTIONS:

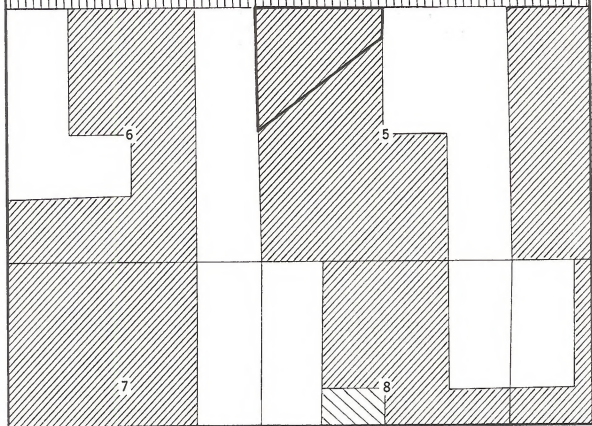
1. Complete "closed" ORV designation and implementation plan.
2. Withdraw from future mineral entry and close to mineral material disposal and oil and gas leasing.
3. Acquire easement.
4. Preclude ROW placement.

R15W

UTE MOUNTAIN INDIAN RESERVATION

T31N

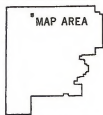
T30N



LEGEND

- SMA BOUNDARY
- BLM LAND
- OTHER FEDERAL LAND
- INDIAN LAND
- PRIVATE LAND

0 1/2 MILE
SCALE



FARMINGTON
RESOURCE AREA

MAP A1-20
BEECHATUDA TONGUE

21. Coal Belt

• GENERAL DESCRIPTION:

The Coal Belt SMA comprises 77,945 acres of public lands along the Fruitland coal belt from the Navajo reservation near Bisti Trading Post to a point near Johnson Trading Post in western Sandoval County. The SMA is mapped on legal subdivisions. The outcrop of the lowest coal seam is represented by the southern line; the northern boundary of the SMA is where the overburden on the uppermost coal seam is 350 feet thick. It is important to retain the surface of the SMA because of the large coal resource base (approximately four billion tons) and the possibility of surface owner conflicts with future mining.

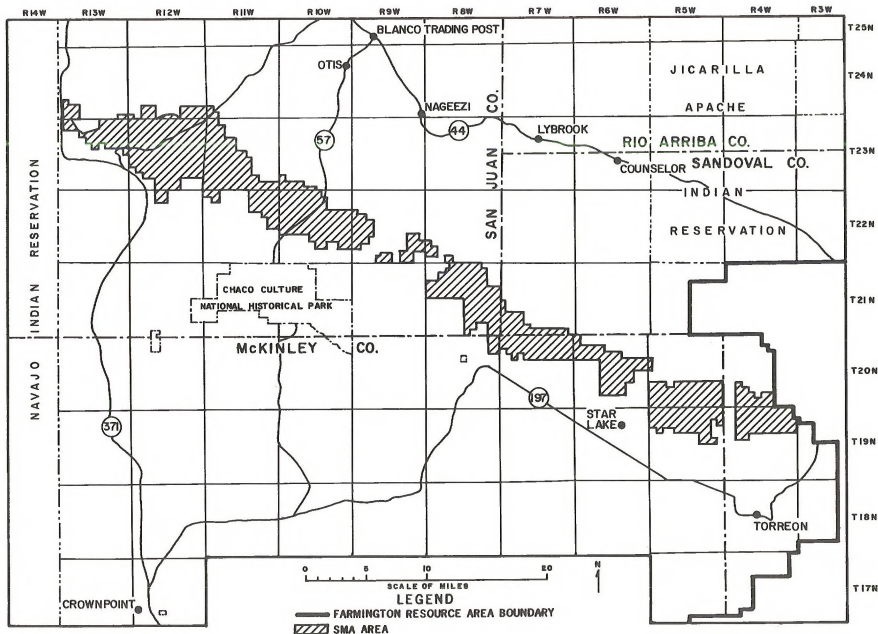
• MANAGEMENT GOALS:

The Coal Belt SMA will be managed to protect coal development potential until the coal is mined.

After mining and reclamation, the public surface will be subject to disposal through one of the methods listed in Chapter 1 of this document. However, the Fossil Forest Research Natural Area and Ah-shi-sle-pah Wilderness Study Area - both located inside the Coal Belt SMA - would be retained under BLM management until Congress decides how they will be managed in the long term.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "open" ORV designation and implementation plan.
2. Further study of coal in support of leasing.
3. Active pursuit of unauthorized occupancies.
4. Informed placement of rights-of-way through areas of low coal development potential.



MAP A1-21
COAL BELT

22. Right-of-Way Windows (4)

• GENERAL DESCRIPTION:

This SMA is comprised of four separate windows. All four are located south of New Mexico State Highway 44. The intent of designating windows was not to require linear ROWs to utilize all four parcels. Instead, the windows were designated in areas which would draw ROWs away from other SMAs such as the Fossil Forest RNA, De-na-zin Wilderness, the Coal Belt SMA, and the Paleontological and Cultural Resources SMAs.

Appendix 4 provides a detailed explanation of the advantages for using the window concept rather than the corridor concept in the Farmington Resource Area. Table A4-1 provides some information on each window. The number beside each ROW name corresponds to the designations on the map.

TABLE A4-1: Right-of-Way Window Summary

No.	Name	Acreage	Sq. Miles	County
1.	Torreon	2,720	4.25	McKinley
2.	Continental Divide	1,760	2.75	McKinley
3.	Escavada	2,680	4.19	San Juan
4.	Betonnie Tsosie	5,440	8.50	San Juan

While little drilling activity has occurred in any of these areas, oil and gas lines have been authorized by the BLM across windows 1 and 3. Powerlines have also been granted by BLM across windows 1, 3, and 4. None of the windows are within areas already leased for coal or under a Preference Right Lease Application for coal. As for mining claims, window 3 had approximately 24 claims within its boundary as of November 1985. No saleable mineral contracts

have been authorized on any of the windows.

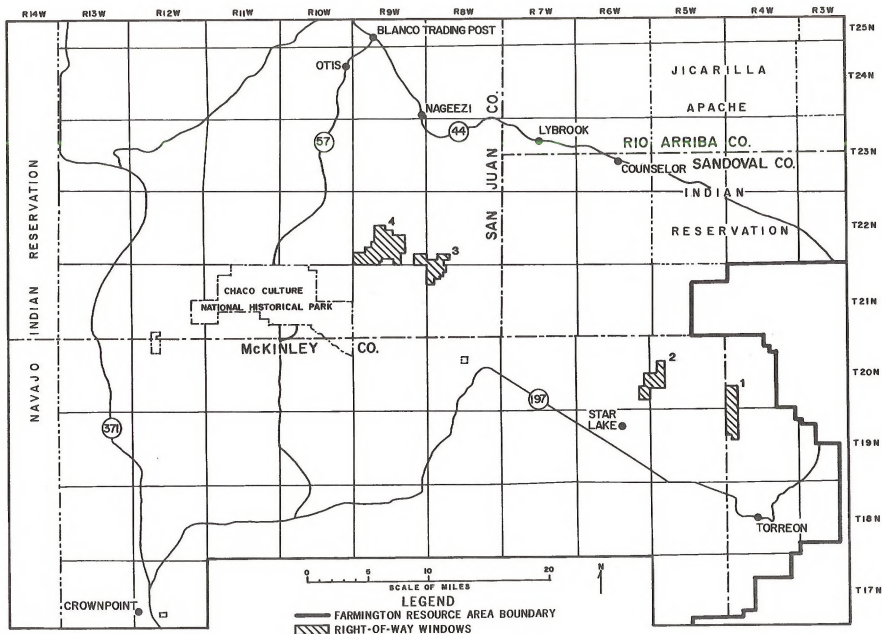
The majority of the acreage within the windows is conducive to the location of ROW easements. Until a Class III cultural resource inventory is completed for a project, it will be difficult to determine the degree of conflict with cultural resources. It should be noted that the Escavada window is located immediately north of a Chaco Outlier site.

• MANAGEMENT GOALS:

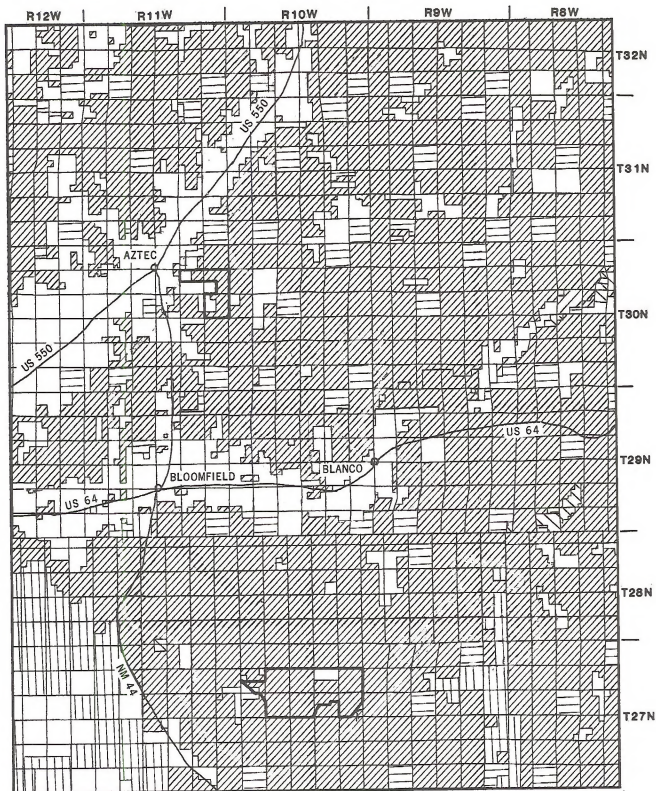
The management goal of this SMA is to route ROWs away from Special Management Areas where ROWs are considered incompatible. The best method of achieving this goal is to provide strategic areas through which utilities and roads should be placed to avoid such conflicts. Within these windows, ROW placement would be considered the highest and best use. Land use allocations which conflict with the purpose of the window designations would be discouraged. If the land or mineral pattern around any of the windows changes enough to impact the intent of the designation, the BLM District Manager can issue a decision to remove its special management status.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "open" ORV designation and implementation plan.
2. Withdrawal from future mineral entry and close to mineral material disposal and oil and gas leasing.
3. Discourage land use authorizations such as landing strips, landfills, and surface mining unless they are highly justified.
4. Develop an activity plan.
5. Institute full fire suppression.

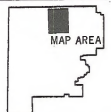


MAP A1-22
RIGHT-OF-WAY WINDOWS



- LEGEND**
- AZTEC GILIA ACEC
 - BLM LAND
 - OTHER FEDERAL LAND
 - INDIAN LAND
 - STATE LAND
 - PRIVATE LAND

2 0 2 4 6 MILES
SCALE



FARMINGTON
RESOURCE AREA

MAP A1-25
AZTEC GILIA ACEC

26. River Tracts

• GENERAL DESCRIPTION:

There are 39 river tracts containing 2,953 acres of public lands scattered along the San Juan, Animas, and La Plata Rivers. Vegetation communities on these tracts vary from upland types containing no riparian vegetation to stands of woody riparian species such as cottonwood, Russian olive, and tamarisk. Some of the tracts also contain wetland communities. The riparian and wetland communities support a variety of wildlife species not commonly found elsewhere in the Resource Area.

The river tracts are also potential recreation and access sites for the public. Some of the tracts have legal access, others do not. Trespass grazing is a problem on several of the tracts. Management incorporating both wildlife and recreation concerns is needed to serve the public and protect the resources on these areas.

• MANAGEMENT GOALS:

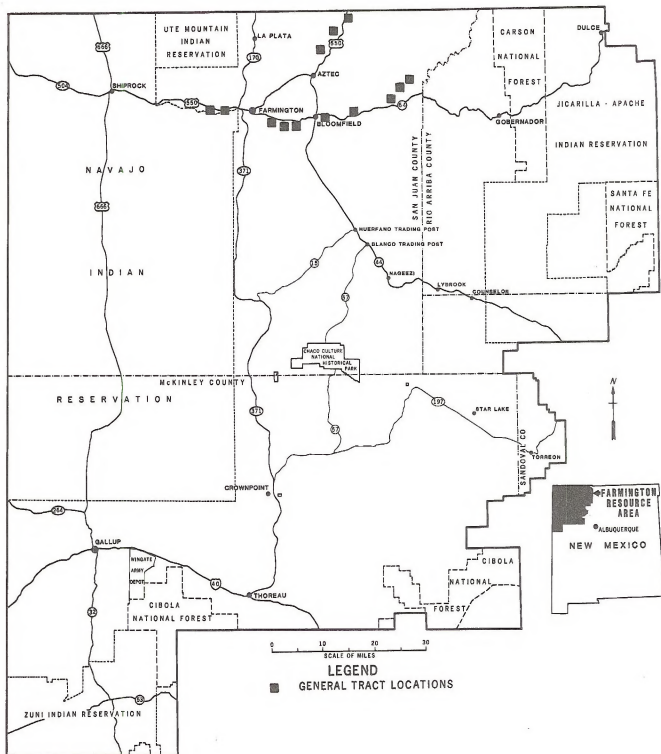
The main goals of this special management area are described in the San Juan Basin River Habitat Management Plan. In general the SMA would be

designed to protect and rehabilitate the riparian and wetland habitats and, when compatible with wildlife, provide river access and recreation sites for the public.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to designated roads.
2. (a) Withdraw from future mineral entry and close to mineral material disposal, (b) no surface occupancy for new oil and gas leases, and (c) apply special stipulations or siting requirements on APDs for existing leases.
3. Acquire easements and non-BLM inholdings.
4. Develop cooperative agreement to formally authorize BLM management of Bureau of Reclamation withdrawn tracts.
5. Close to wood cutting and gathering.
6. Apply limited fire suppression.
7. Implement projects in San Juan Basin River HMP.
8. Study one or more tracts for potential as RNA.

FARMINGTON RESOURCE AREA



MAP A1-26
 RIVER TRACTS

27. Bald Eagle ACEC

• GENERAL DESCRIPTION:

Approximately 80 to 100 bald eagles winter in the Resource Area in the vicinity of the Animas River and Navajo Reservoir. Preferred roosting sites are isolated stands of ponderosa pine located in canyons within pinyon-juniper habitat. Some of these areas also provide important winter habitat for deer and elk. A total of 22 sites covering approximately 3,840 acres are involved. The ACEC makes up 20 use areas covering 1,700 acres.

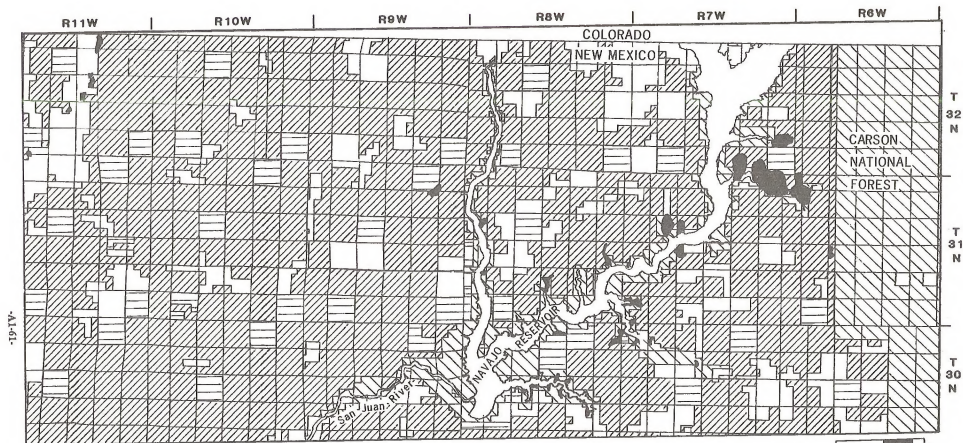
This SMA provides for integrated habitat management and protection for the sites partially covered by the Rosa/Middle Mesa and Pump Habitat Management Plans.

• MANAGEMENT GOALS:






The main goal of this SMA is to provide for the protection of habitat for a federal and state listed endangered species. This is in compliance with the requirements of the Endangered Species Act and BLM policy.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads and trails.
2. Special stipulations or siting requirements for APDs are on existing leases.
3. Continued monitoring on regular basis.
4. Apply limited/conditional fire suppression.
5. Close to wood cutting and gathering.

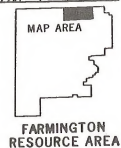


LEGEND

-  BALD EAGLE ACEC
-  BLM LAND
-  OTHER FEDERAL LAND
-  STATE LAND
-  PRIVATE LAND

2 0 2 4 6 MILES
SCALE

↑
N
↓



**MAP A1-27
BALD EAGLE ACEC**

28. Torrejon Fossil Fauna ACEC

• GENERAL DESCRIPTION:

The Torrejon Fossil Fauna ACEC (2,900 acres) was first identified in the Rio Puerco RMP as an area requiring special management. The boundaries of the area straddle the dividing line between the Rio Puerco and Farmington Resource Areas. To protect the scientific value of the fossils and for management consistency, this area will be managed in a like manner to the ACEC designated in the Rio Puerco RMP.

The southeastern part of the San Juan Basin has been an area for mammal fossil localities since the late 1800s. The orders of fossil mammals found in the San Juan Basin are: Multituberculata, Marsupialia, Carnivora, Condylarthra, Deltatheridia, Insectivora, Pantodonta, Primates, and Taeniodonta (compiled by Tsentas 1981). The fossils are found in the variegated mudstone of the Tertiary Nacimiento Formation. The Wood Committee (Wood et al. 1941) formalized the "Torrejonian" as a provincial time term, with the heads of Torreon Wash as the type locality, approximately 20 miles west of Cuba, N.M. Later, the Torrejonian was designated as a North American Land Mammal "Age" (Evernden et al. 1964) which placed it in the middle Paleocene, about 60 million years old. Two zones, an upper *Pantolambda* "zone" and a lower *Deltatherium* "zone" were proposed for the Torrejonian by Sinclair and Granger (1914). Debate over the significance,

and even the validity of the zones has continued to the present (for a review, see Tsentas 1981). Collecting and analysis is ongoing and understanding of the area is continually being improved as new information becomes available.

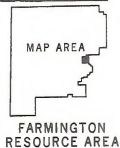
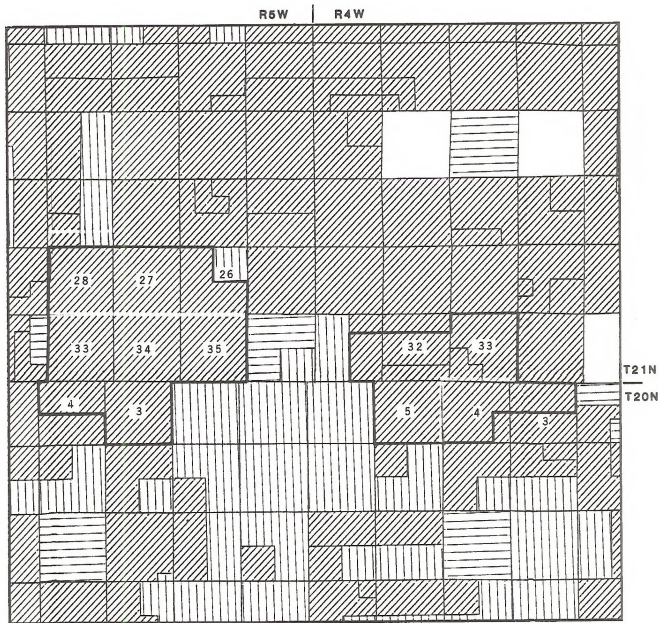
A type locality is an important paleontological feature in that it represents the place at which a fossil assemblage is typically displayed and from which it derives its name. Type specimens of the Torrejonian Fauna were originally recognized and described from this locale; thus the area represents a unique and irreplaceable resource.

• MANAGEMENT GOALS:

The goal of the special management for the Torrejon Fauna Type Locality is to protect the area for scientific study.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads and trails.
2. Acquire easements and non-BLM inholdings.
3. Develop MOU with Rio Puerco Resource Area and implement joint activity plan.
4. Require a paleontological clearance on surface disturbing activities.



MAP A1-28
TORREJON FOSSIL FAUNA ACEC

29. Kutz Canyon Paleontological Area

• GENERAL DESCRIPTION:

Kutz Canyon is an area of 25,826 acres of badlands and canyon topography southeast of Bloomfield, N.M. This area is used for energy development (oil and gas wells), grazing, and recreation.

The first published account of fossils from Kutz Canyon was by Granger (1917) after his 1916 American Museum of Natural History expedition. Subsequent work by other researchers, notably Wilson in the 1940s and 1950s, more than doubled the taxa known. Research is continuing through the present.

Exposures of the Paleocene Nacimiento Formation form the badlands where the fossils are found. Reptile fossils consist of turtle, lizard, and crocodilian remains. The mammal fossils are the most significant. These mammals are critical to the description of what historically has been termed the *Deltatherium* "zone" of the Torrejonian land mammal age. Lucas and O'Neill (1981) reported the first oc-

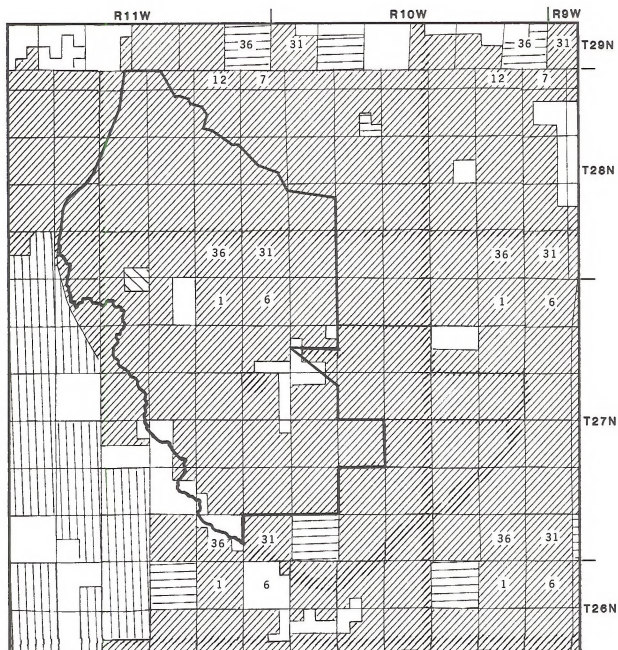
currence of *Pantolambda*, previously thought to be restricted to the *Pantolambda* "zone", in the *Deltatherium* "zone" in Kutz Canyon. This casts doubt on the whole notion of "zones" in the Torrejonian. It also demonstrates the dynamic nature of paleontology and the significance of continued investigation of classic collecting localities.

• MANAGEMENT GOALS:

The goal of the special management for Kutz Canyon is to protect the fossils for scientific study.

• MANAGEMENT PRESCRIPTIONS:

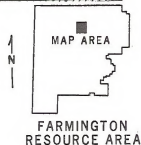
1. Complete "limited" ORV designation and implementation to restrict vehicles to existing roads and trails.
2. Develop activity plan.
3. Require paleontological program clearance on all surface-disturbing activities.
4. Acquire inholdings.



LEGEND

- SMA BOUNDARY
- BLM LAND
- STATE LAND
- INDIAN LAND
- PRIVATE LAND

1 0 1 2 3 MILES
SCALE



MAP A1-29 KUTZ CANYON PALEONTOLOGICAL AREA

30. Betonnie Tsosie

• GENERAL DESCRIPTION:

The type locality for the early Paleocene (Puerco) North American land mammal "age" is located in the vicinity of Betonnie Tsosie Wash approximately 40 miles southeast of Farmington, N.M. The Puerco fauna is found in the lower part of the Nacimiento Formation which forms badlands topography along the washes. The area is used for energy development (oil and gas wells) and grazing.

In 1874 E. D. Cope observed beds below the rocks he identified as Eocene in age at Cuba Mesa. He applied the name Puerco to them, although he didn't find fossils in them. In 1882 he decided that fossils being collected elsewhere for him by D. Baldwin were equivalent. Additional work on "Puerco" beds was conducted by H. F. Osborn, C. Earle, J. L. Wortman, W. Granger, and W. D. Matthew during subsequent years.

It was Matthew (1897) who divided the mammals from what was to be defined as the Paleocene Epoch into two distinct faunas: an older "Puerco" and a younger "Torrejon." Simpson (1981) in his review of the history of the San Juan Basin vertebrate paleontology noted that "Apparently it did not occur to anyone until much later that the Puerco of Cope has a type locality where no fossils had yet been

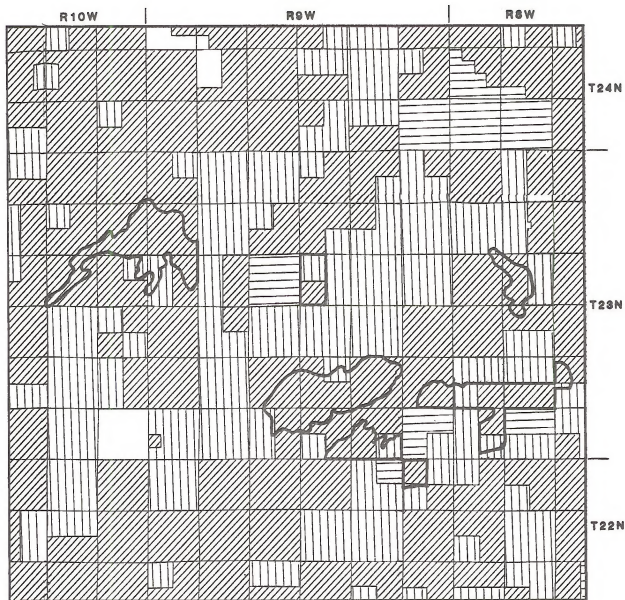
found and which might prove to be equivalent to either 'Puerco' or 'Torrejon' of Matthew, or both, or neither." In 1937 Matthew's studies were posthumously published on the early Tertiary faunas of the San Juan Basin. In this manuscript he delineated the Puerco, Torrejon, and Tiffany faunas which form the Paleocene Epoch such that the rest of the world adopted Matthew's usage. Simpson (1959) demonstrated that at least some of Cope's Puerco is actually Torrejonian in age. The Betonnie Tsosie group represents principal collecting localities for Matthew's Puerco fauna.

• MANAGEMENT GOALS:

The goal for special management of the Betonnie Tsosie group is to facilitate scientific study and protection of the fossils.

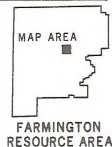
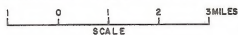
• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads and trails.
2. Acquire easements.
3. Develop activity plan.
4. Require a paleontological clearance on surface-disturbing activities.



LEGEND

-  SMA BOUNDARY
-  BLM LAND
-  STATE LAND
-  INDIAN LAND
-  PRIVATE LAND



MAP A1-30
BETONNIE TSOSIE

31. Fossil Forest Research Natural Area

• GENERAL DESCRIPTION:

The Fossil Forest is an area of approximately 2,770 acres of BLM-administered federal land located about 40 miles south of Farmington in northwestern New Mexico. In the San Juan Basin Wilderness Protection Act (SJBWPA) the area was withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral leasing and geothermal leasing. Final rules and regulations were published in the Federal Register effective November 17, 1985, in which the Fossil Forest was designated a Research Natural Area. The SJBWPA directed the BLM to conduct a long-range study to determine how best to manage the area's resource values and to present recommendations to Congress no later than 1992. The interim management plan guides the administration of the Fossil Forest until the long-range study is completed and acted on by Congress.

The Fossil Forest is dominated by badlands topography where mudstone and sandstone of the Fruitland Formation and Kirtland Shale form low hills and gentle slopes. Stabilized eolian sand covers the high flat areas. Small local areas feature actively shifting sand.

The Upper Cretaceous Fruitland Formation and Kirtland Shale contain a diverse assemblage of fossils including therian mammals, dinosaurs,

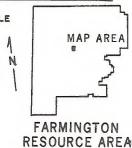
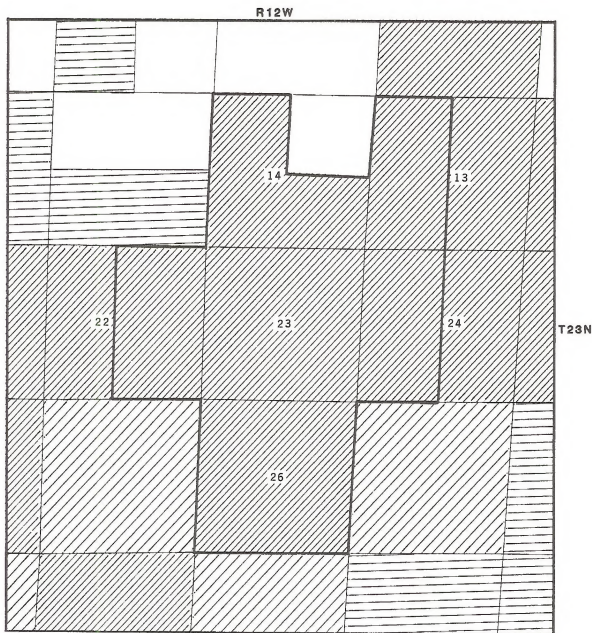
crocodilians, turtles, lizards, fish, bivalves, and plant material. The Fossil Forest gets its name from approximately 40 petrified tree stumps that are found in growth position. Study of the fossils in this area began in the early 1920s by Charles Sternberg, a professional collector, although some work may have occurred earlier. The area was known to science in the decades that followed, but did not receive much attention until a paleontological inventory (Kues et al. 1977) brought to attention the interesting and significant fossils of the area now known as the Fossil Forest. The New Mexico Bureau of Mines and Mineral Resources is presently conducting research in the area.

• MANAGEMENT GOALS:

The management goal of the Fossil Forest is to fulfill the requirement of the law and take such measures as are necessary to ensure that no activities disturb the land surface or impair the area's existing natural, educational, and scientific research values, including paleontological study, excavation, and interpretation.

• MANAGEMENT PRESCRIPTIONS:

1. Acquire easement.
2. Implement Interim Management Plan.
3. Prepare long-range study.
4. Sign and fence portions of boundary.
5. Patrol and monitor on monthly basis.



MAP A1-31
FOSSIL FOREST RESEARCH NATURAL AREA

32. Farmington Lake Watershed

• GENERAL DESCRIPTION:

The Farmington Lake Watershed lies between Farmington and Aztec, just north of U.S. Highway 550. Farmington Lake, at the south end of the watershed, is the major water storage facility for the city of Farmington. Most of the water is supplied from the Animas River through the Farmers Ditch. The watershed flows east and southeast from Hood Mesa. There are 777 acres of public lands in the upper watershed; 882 acres are state and private. Farmington Lake occupies 213 surface acres.

Most of the watershed is gently sloping to moderately steep with broad flat valley bottoms. On Hood Mesa a long series of breaks form the upper watershed boundary.

Nacimientos shales and sandstones underlie the area with Ojo Alamo sandstones on the south and west sides. Deep well-drained soils with loamy sand and sandy loam textures occupy the valley bottoms. A complex of shallow, well-drained to excessively drained soils occur on ridges and breaks. Soil textures range from fine sandy loams to clay loams and silty clay loams.

Vegetation can be described as a scrub/pinyon-juniper savannah aspect with an understory comprised of a variety of shrubs, halfshrubs, grasses, and forbs. Dominant understory shrubs are big sagebrush, rabbitbrush, fourwing saltbush, and broom snakeweed. Grasses include Indian ricegrass, galleta, blue grama, and bottlebrush squirreltail. In a year with favorable growth conditions, the site would be

expected to produce about 800 pounds of forage per acre.

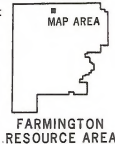
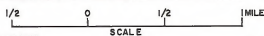
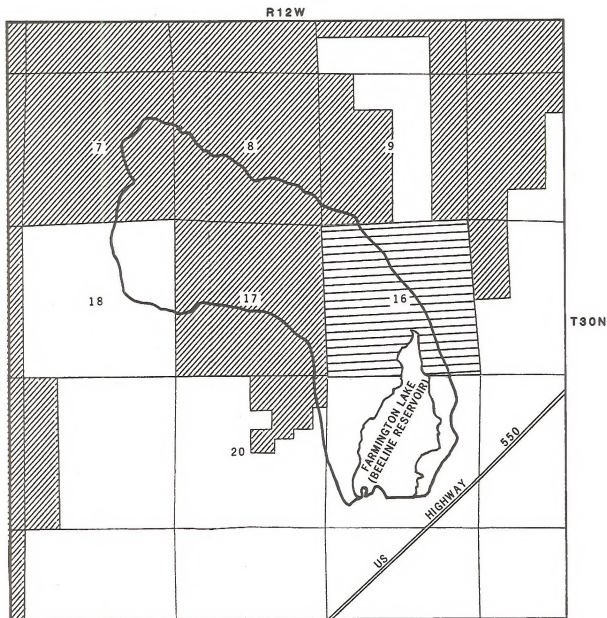
There are eight gas wells, access roads, and part of a sheep grazing allotment within the watershed. Unauthorized trash dumping is a problem throughout the area. Recreation on the reservoir consists principally of fishing and limited non-motorized boating. Swimming is not allowed.

• MANAGEMENT GOALS:

Protect reservoir waters from chemical or bacterial contamination. Extend reservoir life through sediment reductions on the watershed. Specific objectives include maintaining livestock within the allotment, eliminating unauthorized trash dumping, preventing contamination of soils and runoff from oil and gas operations, and initiating rehabilitation measures to reduce sediment production.

• MANAGEMENT PRESCRIPTIONS:

1. Complete "limited" ORV designation and implementation plan to restrict vehicles to existing roads and trails.
2. Acquire non-BLM inholdings.
3. Determine appropriate watershed treatments.
4. Abandon and rehabilitate unnecessary roads and trails.
5. Require lined disposal pits on all wells.
6. Continue well site rehabilitation measures until successful.
7. Install livestock fencing.



MAP A1-32
FARMINGTON LAKE WATERSHED



APPENDIX 2

Land Ownership Adjustments and Easement Acquisitions

This appendix lists proposed land ownership adjustment actions and easements needed to facilitate management of Bureau programs in the Farmington Resource Area. The actions are organized as follows: (1) state lands identified for acquisition, (2) private lands identified for acquisition, (3) public

lands identified for disposal, (4) a list of withdrawn public lands whose withdrawal status has been reviewed during the last five years, and (5) easements identified for acquisition. Easements have been listed for those SMAs and range allotments where they are necessary.

State Lands Identified For Acquisition By Exchange

1. First Priority

A. SMA Areas

T32N R13W, Sec. 16
T31N R8W, Sec. 2
T30N R13W, Sec. 16
T31N R8W, Sec. 2
T30N R16W, Sec. 16, 32
T27N R7W, Sec. 16
T27N R10W, Sec. 32
T24N R13W, Sec. 32(P)
T24N R11W, Sec. 2(P)
T19N R7W, Sec. 16, 32

B. Acquisition Zones

T32N R6W, Sec. 16(P), 32, 36
T32N R7W, Sec. 16, 32, 36
T32N R8W, Sec. 36
T31N R5W, Sec. 32
T31N R7W, Sec. 16, 19(P), 30(P), 31(P), 32(P), 36(P)
T31N R8W, Sec. 36
T30N R5W, Sec. 16, 32
T30N R6W, Sec. 2, 16, 32, 36
T30N R7W, Sec. 2(P), 3(P), 10(P), 19(P), 20(P), 32, 36
T30N R8W, Sec. 36
T30N R9W, Sec. 36(P)
T29N R5W, Sec. 16, 32(P)
T29N R6W, Sec. 2, 16, 32, 36
T29N R7W, Sec. 2, 16, 36
T27N R5W, Sec. 2, 16, 32, 36
T27N R6W, Sec. 2
T24N R12W, Sec. 32

T24N R13W, Sec. 32(P)

T23N R12W, Sec. 5

T23N R13W, Sec. 2

2. Second Priority

A. Retention Zone

T32N R9W, Sec. 16, 32, 36
T32N R10W, Sec. 16, 32, 36
T32N R11W, Sec. 16, 32, 36
T32N R12W, Sec. 16, 36
T32N R13W, Sec. 32
T31N R8W, Sec. 16
T31N R9W, Sec. 2, 16, 32(P), 36
T31N R10W, Sec. 2, 16, 23(P), 24(P), 32, 36
T31N R11W, Sec. 2(P), 16, 32(P), 36
T31N R12W, Sec. 2(P), 16, 32(P), 36
T31N R13W, Sec. 2(P), 16, 32(P), 36
T30N R8W, Sec. 2(P), 16(P), 32
T30N R10W, Sec. 2, 16, 32(P), 36
T30N R11W, Sec. 2(P), 16(P), 32(P), 36
T30N R12W, Sec. 2(P), 16, 36
T30N R13W, Sec. 2, 32(P)
T30N R14W, Sec. 2, 16, 32, 36
T30N R15W, Sec. 2(P), 16(P), 32(P), 36
T30N R16W, Sec. 36(P)
T29N R7W, Sec. 32
T29N R8W, Sec. 2, 16, 32(P), 36
T29N R9W, Sec. 2(P), 32, 36(P)
T29N R10W, Sec. 2(P), 32(P), 36(P)
T29N R11W, Sec. 2(P), 16(P), 32(P), 36
T29N R12W, Sec. 16
T28N R9W, Sec. 16
T28N R10W, Sec. 16(P)
T27N R6W, Sec. 16, 32, 36

T27N R7W, Sec. 2, 32, 36
 T27N R8W, Sec. 2, 16, 32, 36
 T27N R9W, Sec. 2, 16, 32, 36(P)
 T26N R6W, Sec. 2, 16, 32, 36
 T26N R7W, Sec. 2, 16, 32, 36
 T26N R8W, Sec. 2, 16, 32, 36
 T26N R9W, Sec. 2, 16, 32, 36
 T26N R10W, Sec. 2, 16, 32, 36
 T26N R11W, Sec. 2
 T25N R6W, Sec. 2, 16, 32, 36
 T25N R7W, Sec. 2, 16, 32, 36
 T25N R8W, Sec. 2, 16, 32, 36
 T25N R9W, Sec. 2, 16, 32, 36

T25N R10W, Sec. 36
 T24N R6W, Sec. 2, 16, 32, 36
 T24N R7W, Sec. 2, 16, 32, 36
 T24N R8W, Sec. 2, 16, 36
 T24N R9W, Sec. 16
 T24N R10W, Sec. 2
 T23N R6W, Sec. 2(P), 16, 32, 36
 T23N R7W, Sec. 2, 16, 32
 T23N R8W, Sec. 2(P), 36(P)
 T22N R6W, Sec. 2
 T22N R7W, Sec. 16, 32
 T22N R8W, Sec. 16(P), 36

Private Lands Identified For Acquisition

L. SPECIAL MANAGEMENT AREAS

A. San Rafael

(Navajo Refugee Site)

T29N R7W, Sec. 23

S/2SW/4	80
SW/4SE/4	40
E/2NW/4SE/4	20

Sec. 26

N/2NW/4	80
SE/4NW/4	40
W/2NE/4	80
N/2SE/4	80
E/2SW/4	80
SW/4SW/4	40

Sec. 27

SE/4SE/4	40
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B. Chacra Mesa Complex

T19N R7W, Sec. 17 S/2

320

Sec. 19 All

640

Sec. 20 SE/4

160

Sec. 21

NE/4NW/4	40
SW/41	60

Sec. 27 SE/4

160

Sec. 29 All

640

Sec. 31 All

640

Sec. 33 All

640

C. De-na-zin Wilderness

T24N R11W, Sec. 7 N/2

320

Sec. 8

N/2	320
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C. De-na-zin Wilderness (Cont.)

Acres

SW/4

160

Sec. 9 SW/4

160

Sec. 16 SW/4

160

Sec. 20 SW/4

160

Sec. 21 Irregular Tract

52

T24N R12W, Sec. 12, W/2

320

D. Dunes Vehicle Recreation Area

T29N R13W, Sec. 29 Irregular Tract

30

E. Angel Peak Recreation Area

T26N R10W Sec. 6

S/2NE/4

80

NW/4NE/4

40

W/2

320

SE/4

160

F. Aztec Gila ACEC

T27N R10W Sec. 11 N/2

320

T30N R11W Sec. 11 NW/4

160

Sec. 13

W/2NW/4

80

SE/4NW/4

40

N/2SW/4

160

G. Reese Canyon RNA

T32N R7W, Sec. 8 Irregular Tract

40

H. Torrejon Fossil Fauna ACEC

T21N R5W, Sec. 21 S/2SE/4

80

I. Kutz Canyon Paleontological Area

T27N R10W, Sec. 7 SE/4SW/4	40
Sec. 8	
NE/4NE/4	40
SW/4NW/4	40
W/2SW/4	80
SE/4SW/4	40
SW/4SE/4	40
Sec. 17	
NW/4NE/4	40
N/2NW/4	80
Sec. 18 E/2E/2	160
Sec. 19 NE/4NE/4	40
T27N R11W, Sec. 2 W/2	320
Sec. 23 Irregular Tract	160
Sec. 25 Irregular Tract	70
Sec. 26 Irregular Tract	70
Sec. 36 Irregular Tract	200

J. Farmington Lake Watershed

T30N R12W, Sec. 18 NE/4	160
Sec. 20 Irregular Tract	5
Sec. 21 Irregular Tract	240

2. WILDLIFE/RANGE/RECREATION
ACQUISITION ZONE

T32N R6W, Sec. 7	
SE/4NE/4	40
S/2S/2	160
Sec. 8	
S/2NE/4	100
S/2NW/4	100
NE/4SW/4	40
SW/4SW/4	40
N/2SE/4	80
SE/4SE/4	40
Sec. 9	200*
Sec. 10	380*
Sec. 11	300*
Sec. 12	110*
Sec. 13	40*
Sec. 14	5*
Sec. 15	140*
Sec. 16	160*
Sec. 17	
W/2NW/4	80
NW/4SW/4	40
Sec. 18	
N/2	320
SW/4	160

2. WILDLIFE/RANGE/RECREATION
ACQUISITION ZONE (Cont.) ACRES

N/2SE/4	80
Sec. 19	
N/2	320
SW/4	160
NW/4SE/4	40
Sec. 20 All	640
Sec. 23 E/2SE/4	80
Sec. 24	
SW/4	160
W/2SE/4	80
Sec. 29 SW/4SW/4	40
Sec. 30	
NW/4NW/4	40
N/2NW/4	80
SW/4SE/4	40
E/2SE/4	80
Sec. 31 All	640
Sec. 33 10*	
Sec. 34 10*	
T32N R7W, Sec. 7	
SW/4NE/4	40**
SE/4NW/4	40
NE/4SW/4	40
W/2SE/4	80
Sec. 8	
S/2NE/4	80**
SE/4NW/4	40
E/2SW/4	80
W/2SE/4	80
NE/4SW/4	40
Sec. 9	
SW/4NW/4	40**
NW/4SW/4	40
Sec. 10	
S/2NE/4	80**
N/2SE/4	80
SE/4SE/4	40
Sec. 11	
SE/4NE/4	40**
S/2NW/4	80
SW/4	160
W/2SE/4	80
Sec. 12	
S/2NE/4	80**
SE/4NW/4	40
E/2SW/4	80
SE/4	160
Sec. 13	
E/2	320**
E/2NW/4	80

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

	SW/4	160		Sec. 16	70*	
Sec. 14	NW/4NE/4	40**		Sec. 21		
	N/2NW/4	80			NE/4	160
	SE/4NW/4	40			E/2NW/4	70
Sec. 15				Sec. 22	S/2S/2	160
	NE/4NE/4	40*		Sec. 24		
Sec. 18		160*			NE/4	160
Sec. 19		40*			E/2NW/4	80
Sec. 20					NE/4SW/4	40
	NE/4	160**			N/2SE/4	80
	E/2NW/4	80		Sec. 27		
	SW/4	10			E/2E/2	160
	E/2SE/4	80			NW/4NE/4	40
Sec. 21					N/2NW/4	80
	W/2NE/4	80		Sec. 28		
	NW/4	160			N/2NE/4	80
	S/2	320			SW/4NE/4	40
Sec. 22	SW/4	160			NW/4	160
Sec. 24	All	640		Sec. 33		
Sec. 25					S/2N/2	160
	N/2NE/4	80			S/2SW/4	80
	NW/4	160			NE/4SW/4	40
Sec. 26	E/2NE/4	80			N/2SE/4	80
Sec. 29		40*			SE/4SE/4	40
Sec. 31		5*		Sec. 34	N/2	320
Sec. 32		50*		Sec. 35		
T31N R5W, Sec. 18					W/2NE/4	80
	SW/4NE/4	40			NW/4	160
	Lot 2	40		T31N R7W, Sec. 1		
	Lot 3	40			SW/4	160
	NW/4SE/4	40			W/2SE/4	80
Sec. 29					SE/4SE/4	40
	S/2NE/4	80		Sec. 2	S/2	320
	E/2SE/4	80		Sec. 3		
T31N R6W, Sec. 2					E/2SW/4	80
	S/2SW/4SW/4	20			S/2SE/4	80
	SE/4SW/4	40		Sec. 7	S/2S/2SE/4SW/4	10
	W/2SW/4SE/4	20		Sec. 9	S/2	320
	SE/4SW/4SE/4	10		Sec. 10	NW/4	160
	S/2SE/4SE/4	20		Sec. 11		
Sec. 6	S/2SW/4	80			E/2	320
Sec. 7					SE/4SW/4	40
	W/2NE/4	80		Sec. 12		
	N/2NW/4	80			N/2NE/4	80
Sec. 8	W/2E/2	160			SW/4NE/4	40
Sec. 13					NW/4	160
	W/2SW/4SW/4	20			W/2SW/4	80
	SE/4SW/4	40		Sec. 15		
	S/2SE/4	80			SW/4NE/4	40
Sec. 15		10*			SE/4NW/4	40
					SW/4	160

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

	NW/4SE/4	40		S/2	320
Sec. 17	E/2	320	Sec. 27	NW/4	160
	E/2NW/4	80		S/2	320
Sec. 18		80*	Sec. 28 E/2NE/4		80
Sec. 19		100*	Sec. 31 SE/4SW/4		40
Sec. 20	E/2NE/4	80	T30N R6W, Sec. 4	E/2E/2	160
	W/2NW/4	80		NW/4NW/4	40
	E/2SW/4	80	Sec. 8	E/2SW/4	80
	SE/4	160		SE/4	160
Sec. 21	W/2	320	Sec. 9	NE/4NE/4	40
	W/2SE/4	80		SW/4	160
Sec. 22 N/2NW/4		80		W/2SE/4	80
Sec. 28 N/2NW/4		80	Sec. 10		140*
Sec. 29 N/2		320	Sec. 11	SE/4NE/4	40
Sec. 30		90*		SW/4NW/4SW/4	10
Sec. 31		15*		NW/4SW/4SW/4	10
Sec. 32		15*		S/2SE/4SW/4	20
T31N R8W, Sec. 24 S/2		320		S/2S/2SE/4	40
Sec. 25 All		640	Sec. 12		230**
T30N R5W, Section 3			Sec. 13 All		480
	W/2SW/4	80	Sec. 14	S/2NE/4	80
	SE/4SW/4	40		E/2SE/4	80
	S/2SE/4	80	Sec. 19	SE/4NE/4	40
	NE/4SE/4	40		SE/4SW/4	40
Sec. 4 S/2SE/4		80		S/2SE/4	80
Sec. 7	S/2SW/4	80		NE/4SE/4	40
	NE/4SW/4	40	Sec. 20	E/2NE/4	80
	SW/4SE/4	40		SW/4NE/4	40
Sec. 8	E/2	320		S/2NW/4	80
	S/2SW/4	80		S/2	320
Sec. 9 W/2		320	Sec. 21	W/2NE/4	80
Sec. 15 N/2		320		NW/4	160
Sec. 17	E/2	320		N/2SW/4	80
	N/2NW/4	80		SW/4SW/4	40
Sec. 18	W/2NW/4	80		S/2NE/4SE/4SW/4	5
	SE/4NW/4	40		SE/4SE/4SW/4	10
	SW/4	160		NW/4SE/4	40
Sec. 19 NW/4		160		S/2NW/4SW/4SE/4	5
Sec. 21	NW/4	160		SW/4SW/4SE/4	10
	E/2SW/4	80	Sec. 23 E/2NE/4		80
	SE/4	160	Sec. 24 NW/4		160
Sec. 22	SE/4NE/4	40	Sec. 26 S/2SW/4		80

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

Sec. 28	W/2W/2NE/4	40	T30N R8W, Sec. 10	S/2SW/4	80
	NW/4	160		NE/4SW/4	40
	SW/4	160		N/2SE/4	80
	SW/4SE/4	40	Sec. 14	SW/4NE/4	40
Sec. 29	N/2NE/4	80		S/2NW/4	80
	SE/4	160		SW/4	160
Sec. 33	N/2NE/4	80		N/2SE/4	80
	SW/4NE/4	40	Sec. 15	NW/4	160
	NW/4	160		S/2SW/4	80
	S/2SW/4	80		SE/4	160
	NE/4SW/4	40	Sec. 17	SE/4SW/4	40
Sec. 34	S/2NE/4	90		SE/4	160
	S/2	320	Sec. 19	SE/4NE/4	40
Sec. 35 W/2NW/4		80		E/2SW/4	80
T30N R7W, Sec. 6		10*		N/2SE/4	80
Sec. 15	W/2SW/4	80		SW/4SE/4	40
	SE/4SW/4	40	Sec. 20	NW/4NE/4	40
Sec. 16 E/2SE/4		80		E/2NW/4	80
Sec. 17 SE/4SE/4		40		SW/4NW/4	40
Sec. 20	NE/4	160	Sec. 30	W/2NE/4	80
	NE/4SW/4	40		E/2NW/4	80
	N/2SE/4	80		NE/4SW/4	40
Sec. 21	W/2NE/4	80	T30N R9W, Sec. 25	NE/4	160
	SW/4NE/4	40		W/2NW/4	80
	S/2NW/4	80		SW/4	160
	NW/4NW/4	40		N/2SE/4	80
Sec. 23	W/2NE/4	80	Sec. 26	SE/4NE/4	40
	NW/4	160		E/2SE/4	80
	S/2SW/4	80	Sec. 32	SE/4SW/4	40
	NE/4SW/4	40		SW/4SE/4	40
	SW/4	160	Sec. 33	S/2NE/4	80
Sec. 24	W/2NW/4	80		SE/4NW/4	40
	W/2SW/4	80		E/2SW/4	80
	SE/4SW/4	40		SE/4	160
Sec. 25 NW/4		160	Sec. 34	S/2NW/4	80
Sec. 31	E/2	320		S/2	320
	E/2W/2	160	Sec. 35	W/2NE/4	80
Sec. 33	NE/4NE/4	40		SW/4NE/4	40
	SE/4SW/4	40			
Sec. 34 W/2W/2		160			

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

	SE/4NW/4	40		W/2SE/4	80
	S/2	320	Sec. 28	W/2	320
Sec. 36	W/2NW/4	80		W/2NW/4	80
	NW/4SW/4	40		N/2SW/4	80
T29N R5W, Sec. 3	SE/4SW/4	40		SE/4	160
	SW/4SE/4	40	Sec. 29	S/2SW/4	80
Sec. 5 S/2		320	Sec. 30	N/2N/2	160
Sec. 6	N/2NW/4	80		SW/4	160
	SE/4	160		S/2SE/4	80
Sec. 7	E/2	320	Sec. 31	N/2	320
	S/2NW/4	80		N/2SW/4	80
	SW/4	160		SW/4SW/4	40
Sec. 10	E/2NE/4	80		N/2SE/4	80
	SE/4NE/4	40	Sec. 32	E/2SW/4	80
	E/2NW/4	80		W/2SE/4	80
	SE/4	160	Sec. 33	W/2NW/4	80
Sec. 14	NW/4	160		N/2SW/4	80
	S/2SW/4	80	Sec. 34	W/2E/2	160
	NE/4SW/4	40		E/2W/2	160
	W/2SE/4	80	T29N R6W, Sec. 1	E/2NE/4NE/4	20
Sec. 15	NE/4NE/4	40		E/2SW/4NE/4	20
	NW/4	160		SE/4NE/4	40
	S/2	320		E/2SW/4	80
Sec. 17	E/2	320		N/2SE/4	80
	E/2E/2	160		SW/4SE/4	40
Sec. 18	N/2	320		W/2SE/4SE/4	20
	N/2SE/4	80	Sec. 3	N/2	320
Sec. 19	W/2E/2	160		SW/4	160
	W/2	320		W/2SE/4	80
Sec. 20 E/2		320		SE/4SE/4	40
Sec. 21 All		640	Sec. 4 All		640
Sec. 22	N/2	320	Sec. 5	SE/4NE/4	40
	SW/4	160		SW/4NW/4	40
	N/2SE/4	80		W/2SW/4	80
Sec. 23	N/2NW/4	80		SE/4SW/4	40
	SW/4NW/4	40		NE/4SE/4	40
Sec. 27	SW/4NE/4	40	Sec. 6 E/2		320
	W/2	320	Sec. 7	NE/4	160
				SW/4NW/4	40
				SW/4SW/4	40
				N/2SE/4	80

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

Sec. 8				W/2	320
	W/2NE/4	80		SE/4	160
	SE/4NE/4	40	Sec. 21		
	NW/4	160		E/2	320
	N/2SW/4	80		E/2NW/4	80
	SE/4SW/4	40		SW/4	160
	SW/4	160	Sec. 22		
Sec. 9				N/2NE/4	80
	N/2NE/4	80		SW/4NE/4	40
	SW/4NE/4	40		W/2NW/4	80
	W/2	320		SE/4NW/4	40
	SE/4	160	Sec. 23	N/2NW/4	80
Sec. 10			Sec. 24	E/2NW/4	80
	NE/4	160	Sec. 26		
	NW/4NW/4	40		SW/4	160
	E/2SW/4	80		W/2SE/4	80
	SW/4SW/4	40		S/2SE/4SE/4	20
	NW/4SE/4	40	Sec. 27		
Sec. 11				E/2NE/4	80
	W/2NW/4	80		SW/4NE/4	40
	NW/4SW/4	40		S/2NW/4	80
Sec. 12				SW/2	320
	N/2NE/4	80	Sec. 28		
	SE/4NE/4	40		S/2NE/4	80
	NE/4NW/4	40		W/2NW/4	80
	E/2SE/4SE/4	20		SE/4NW/4	40
Sec. 13				S/2	320
	N/2NE/4	80	Sec. 29		
	W/2SW/4NE/4	20		NE/4	160
	NW/4	160		NE/4NW/4	40
	E/2SW/4	80		S/2SW/4	80
	E/2NE/4SE/4	20		N/2SE/4	80
	W/2NW/4SE/4	20		SW/4SE/4	40
	S/2SE/4	80	Sec. 30	SE/4SE/4	40
Sec. 14	E/2NE/4	80	Sec. 31		
Sec. 17				SW/4	160
	N/2NE/4	80		SW/4SE/4	40
	NE/4NW/4	40	Sec. 34		
	S/2SE/4	80		W/2NW/4	80
	NE/4SE/4	40		SE/4NW/4	40
Sec. 18				N/2SW/4	80
	SW/4NE/4	40		SE/4SW/4	40
	W/2	320		S/2SE/4	80
	W/2SE/4	80	Sec. 35		
Sec. 19				N/2NE/4	80
	NW/4	160		NE/4NW/4	40
	NE/4SW/4	40		SW/4SW/4	40
	SE/4	160	T29N R7W, Sec. 3	NW/4NW/4	40
Sec. 20			Sec. 4		
	N/2NE/4	80		N/2NE/4	80
	SW/4NE/4	40		SW/4NE/4	40

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

	W/2	320	W/2NE/4	80
Sec. 5 All		640	N/2NW/4	80
Sec. 6			SE/4NW/4	40
	NE/4	160	E/2SW/4	80
	E/2NW/4	80	SW/4SW/4	40
	E/2SE/4	80	N/2SE/4	80
Sec. 7 E/2NE/4		80	Sec. 27 SE/4SE/4	40
Sec. 8			T29N R9W, Sec. 2	
	N/2N/2	160	W/2NE/4	80
	S/2NW/4	80	NW/4	160
Sec. 9			Sec. 3	
	NE/4NE/4	40	N/2	320
	SW/4NE/4	40	N/2S/2	160
	E/2NW/4	80	Sec. 4	
	NW/4NW/4	40	N/2	320
	NE/4SW/4	40	SW/4	160
	W/2SE/4	80	N/2SE/4	80
	SE/4SE/4	40	SW/4SE/4	40
Sec. 10			Sec. 5 All	640
	W/2NW/4	80	Sec. 6	
	SW/4	160	N/2NE/4	160
	S/2SE/4	80	SE/4NE/4	40
	NE/4SE/4	40	SE/4SW/4	40
Sec. 11			SE/4	160
	SW/4NE/4	40	Sec. 7	
	S/2SW/4	80	E/2	320
	NE/4SW/4	40	E/2NW/4	160
	NW/4SE/4	40	E/2SW/4	160
Sec. 12			Sec. 8	
	S/2N/2	160	N/2N/2	160
	S/2	320	SW/4NW/4	40
Sec. 13			N/2SW/4	80
	N/2	320	T28N R5W, Sec. 7	
	N/2SW/4	80	SW/4	160
	SE/4SW/4	40	W/2SE/4	80
	SE/4	160	SE/4SE/4	40
Sec. 14			Sec. 9	
	S/2NW/4	160	N/2SW/4	80
	S/2	320	SE/4SW/4	40
Sec. 15			SW/4SE/4	40
	N/2	320	Sec. 15	
	NE/4SE/4	40	W/2E/2	160
	N/2SE/4	160	W/2	320
Sec. 23			Sec. 16 All	640
	NE/4	160	Sec. 18	
	E/2NW/4	80	W/2NE/4	160
	S/2SW/4	80	NW/4	160
	NE/4SW/4	40	N/2SW/4	160
	W/2SE/4	80	SW/4SW/4	40
Sec. 24 N/2		320	NW/4SE/4	40
Sec. 26			Sec. 19 W/2NW/4	80

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

Sec. 21	NE/4NE/4	40	Sec. 14	S/2SW/4	80
	N/2SW/4	80		NE/4SW/4	40
	SE/4SW/4	40		SE/4	160
	SW/4SE/4	40	Sec. 15	S/2SE/4	80
Sec. 22	NW/4NE/4	40	Sec. 21	SE/4NE/4	40
	N/2NW/4	80		SE/4SW/4	40
Sec. 25	E/2SW/4	80		W/2SE/4	80
	NW/4SE/4	40		NE/4SE/4	40
Sec. 27	NW/4	160	Sec. 22	E/2	320
	N/2SW/4	80		SW/4NW/4	40
Sec. 28	NE/4	160		W/2SW/4	80
	NE/4NW/4	40	Sec. 23	N/2	320
	NE/4SE/4	40		N/2SW/4	80
Sec. 29	N/2NE/4	80		SE/4SW/4	40
	SW/4NE/4	40		SE/4	160
	W/2	320	Sec. 24	All	640
	NW/4SE/4	40	Sec. 25	N/2SE/4	80
Sec. 32	All	640		NW/4	160
Sec. 33	W/2NE/4	80	Sec. 26	NE/4	160
	E/2NW/4	80		W/2	320
Sec. 34	SW/4	160	Sec. 27	S/2SE/4	80
	SE/4SE/4	40	Sec. 28	N/2NW/4	80
Sec. 35	S/2NE/4	80	Sec. 29	N/2NE/4	80
	NW/4	160		W/2SE/4	80
	N/2SW/4	80	Sec. 31	S/2SE/4	80
	SW/4SW/4	40		NE/4SE/4	40
	NW/4SE/4	40	Sec. 32	NE/4	160
Sec. 36	N/2NE/4	80		E/2NW/4	80
	E/2NW/4	80		N/2SW/4	80
	SW/4NW/4	40	Sec. 33	N/2	320
T28N R6W, Sec. 7 S/2		320		NE/4SW/4	40
Sec. 10 E/2SE/4		80	Sec. 34	N/2	320
Sec. 11 W/2SW/4		80	Sec. 35	S/2SE/4	80
Sec. 12	SE/4SW/4	40		NE/4SE/4	40
	SW/4SE/4	40	Sec. 36	SE/4NW/4	40
Sec. 13	N/2NE/4	80		S/2	320
	SW/4	160	T28N R7W, Sec. 12 E/2SE/4		80
	W/2SE/4	80	Sec. 13	NE/4NE/4	40
	SE/4SE/4	40			

2. WILDLIFE/RANGE/RECREATION ACQUISITION ZONE (Cont.)

ACRES

	N/2NW/4	80	Sec. 12	SE/4	160
	SE/4NW/4	40	Sec. 13		
	E/2SW/4	80		E/2	320
Sec. 14				SW/4	160
	N/2NE/4	80	Sec. 14		
	NE/4NW/4	40		E/2SW/4	80
Sec. 24				SE/4	160
	W/2E/2	160	Sec. 15	E/2SE/4	80
	E/2NW/4	80	Sec. 17		
	NE/4SW/4	40		E/2NE/4	80
Sec. 25				SE/4NE/4	40
	W/2NE/4	80		N/2NW/4	80
	S/2SW/4	80		SW/4NW/4	40
	NE/4SW/4	40		S/2SW/4	80
	NW/4SE/4	40		S/2SE/4	80
Sec. 26	SE/4SE/4	40		NE/4SE/4	40
Sec. 34	N/2NE/4	80	Sec. 18		
Sec. 35				N/2	320
	NE/4	160		SW/4	160
	N/2NW/4	80	Sec. 19		
T27N R4W, Sec. 17	W/2SW/4	80		N/2	320
Sec. 18				SE/4	160
	N/2NE/4	80	Sec. 20		
	SW/4NE/4	40		E/2NE/4	80
	W/2	320		SW/4NE/4	40
	N/2SE/4	80		W/2	320
Sec. 19				SE/4	160
	SW/4NW/4	40	Sec. 21		
	W/2SW/4	80		E/2NE/4	80
	SE/4SW/4	40		SW/4NE/4	40
	E/2SE/4	80		W/2W/2	160
Sec. 20				N/2SE/4	80
	SE/4NE/4	40	Sec. 22		
	N/2SW/4	80		NE/4NE/4	40
	N/2SE/4	80		NW/4	160
	SE/4SE/4	40		NW/4SW/4	40
T27N R5W, Sec. 3			Sec. 23		
	E/2NE/4	80		NE/4NE/4	40
	SW/4	160		NW/4	160
	N/2SE/4	80		NW/4SW/4	40
Sec. 4			Sec. 24		
	S/2NE/4	80		S/2NE/4	80
	E/2NW/4	80		NW/4NW/4	40
	SE/4	160		S/2SW/4	80
Sec. 5	SW/4SW/4	40		NE/4SW/4	40
Sec. 7	SE/4	160		SE/4	160
Sec. 8			Sec. 25	All	640
	W/2NW/4	80	Sec. 26		
	SE/4NW/4	40		E/2	320
	S/2	320		S/2NW/4	80
Sec. 10	NW/4NW/4	40		N/2SW/4	80

**2. WILDLIFE/RANGE/RECREATION
ACQUISITION ZONE (Cont.)ACRES**

Sec. 28		
	SW/4	160
	W/2SE/4	80
	SE/4SE/4	40
Sec. 29 S/2		320
Sec. 30		
	NW/4NW/4	40
	S/2SE/4	80
Sec. 31 W/2NE/4		80
Sec. 33 All		640
Sec. 34		
	N/2	320
	N/2SW/4	80
	SE/4	160
Sec. 35 N/2NW/4		80
T27N R6W, Sec. 6		
	NW/4NE/4	40
	N/2NW/4	80
	SW/4NW/4	40
Sec. 7		
	NE/4NE/4	40
	SE/4SE/4	40
Sec. 8		
	NW/4NE/4	40
	N/2NW/4	80
	SW/4NW/4	40
	W/2SW/4	80
Sec. 9 NE/4NE/4		40
Sec. 10		
	NW/4	160
	NE/4SE/4	40
Sec. 11		
	N/2SW/4	80
	SE/4SW/4	40
Sec. 13		
	SE/4SW/4	40
	W/2SE/4	80
	SE/4SE/4	40
Sec. 14		
	N/2NE/4	80
	SE/4NE/4	40
Sec. 24		
	NE/4	160
	E/2SE/4	80
Sec. 25		
	E/2NE/4	80
	SW/4NE/4	40
	S/2NW/4	80
	NE/4SW/4	40
	NW/4SE/4	40

**3. WILDERNESS ACQUISITION ZONE
ACRES**

T24N R12W, Sec. 3		
	W/2NW/4	80
	W/2SW/4	80
Sec. 4 All		640
Sec. 5 E/2		320
Sec. 8		
	NE/4	160
	S/2	320
Sec. 9		
	NW/4	160
	W/2SW/4	80
Sec. 17 All		640
Sec. 18		
	NE/4	160
	S/2	320
Sec. 19		
	N/2	320
	SW/4	160
	W/2SE/4	80
	NE/4SE/4	40
Sec. 20		
	NW/4	160
	NW/4NE/4	40
Sec. 30		
	W/2 320	
	W/2NE/4	80
	W/2SE/4	80
Sec. 31		
	NW/4	160
	W/2NE/4	80
	W/2SE/4	80
	N/2SW/4	80
	SE/4SW/4	40
T24N R13W, Sec. 13 S/2		320
Sec. 22 All		640
Sec. 23 All		640
Sec. 24 All		640
Sec. 25 All		640
Sec. 26 All		640
Sec. 27		
	NW/4	160
	E/2	320
Sec. 35 All		640
Sec. 36		
	W/2	320
	NE/4	160
	N/2SE/4	80

* Tracts bordering on Navajo Reservoir (acreage estimated)

** Irregular sections (acreage estimated)

Public Lands Identified For Disposal (Acres)

T32N R10W, N.M.P.M.			N/2SW/4SW/4NW/4, SE/4SW/4NW/4,	
Sec. 32: Lot 1 NE/4SE/4	40.84		N/2SW/4NW/4	75
T32N R11W, N.M.P.M.			T30N R16W, N.M.P.M.	
Sec. 10: Lot 1 NE/4SE/4	43.83		Sec. 2: Lots 3 and 4	
Sec. 19: SE/4NW/4	40		N/2NW/4, S/2NW/4	157.84
Sec. 20: NW/4SW/4	40		T29N R9W, N.M.P.M.	
T32N R12W, N.M.P.M.			Sec. 30: Lot 6 W/2SW/4NW/4	10.47
Sec. 13: SE/4SE/4	40		T29N R11W, N.M.P.M.	
Sec. 28: E/2NE/4, NE/4SE/4	120		Sec. 6: NW/4	137.8
Sec. 35: S/2NE/4	80		Sec. 13: NE/4SW/4	40
T32N R13W, N.M.P.M.			Sec. 15: SW/4NW/4	40
Sec. 35: E/2SW/4	80		Sec. 27: S/2NW/4SW/4SW/4,	
T31N R10W, N.M.P.M.			W/2SE/4SW/4SW/4	10
Sec. 4: Lot 5 SW/4SW/4	38.64		Sec. 28: N/2NW/4NE/4NE/4	80
T31N R11W, N.M.P.M.			Sec. 33: N/2NW/4NE/4NE/4	5
Sec. 13: NE/4NE/4	40		T29N R12W, N.M.P.M.	
Sec. 35: S/2SE/4, NE/4SE/4	120		Sec. 5: NE/4NE/4SW/4	10
T31N R12W, N.M.P.M.			Sec. 17: NE/4NE/4SW/4	10
Sec. 1: Lots 6 & 7 N/2SW/4	72.89		Sec. 19: S/2SE/4NE/4SE/4,	
Sec. 25: N/2NW/4	80		SW/4SE/4NE/4	15
T30N R11W, N.M.P.M.			Sec. 20: NE/4NE/4SW/4	10
Sec. 2: Lot 5 NW/4NE/4	39.67		Sec. 21: Lots 10, 11, 12	55.47
Sec. 10: Lot 2 SW/4SE/4	78.04		Sec. 26: Lot 1	19.96
Sec. 15: Lots 5, 6, 7			Sec. 27: N/2N/2NE/4, SE/4NW/4NE/4,	
W/2SW/4, SE/4SW/4	123.42		SW/4NE/4NE/4, E/2SE/4NE/4NE/4,	
T30N R12W, N.M.P.M.			E/2SW/4NW/4NE/4	70
Sec. 1: Lots 5, 6, 7, 8			Sec. 28: Lot 2	6.2
SW/4NE/4, W/2SE/4,			T29N R13W, N.M.P.M.	
SE/4SE/4	153.99		Sec. 4: SW/4NW/4NE/4	10
Sec. 15: Lots 1 & 2			Sec. 5: Lot 6,	
W/2NW/4	80.45		SE/4NE/4SW/4	19.98
Sec. 19: SW/4SW/4NE/4	10		Sec. 6: Lots 9, 13, W/2SW/4SE/4, S/2	
Sec. 20: Lots 12, 14, 15, 17	39.66		SE/4SW/4SE/4, SE/4SE/4	79.95
T30N R13W, N.M.P.M.			Sec. 7: Lot 1, NW/4NW/4NE/4,	
Sec. 20: NE/4NW/4, SW/4NE/4	80		W/2SW/4NW/4NE/4	19.64
Sec. 26: NW/4SE/4SE/4SW/4, SW/4SW/4			T27N R9W, N.M.P.M.	
SE/4SW/4, S/2SW/4SW/4SE/4,			Sec. 25: SE/4	160
NW/4SW/4SW/4SE/4	12.5		T26N R7W, N.M.P.M.	
Sec. 27: NW/4NW/4SE/4	10		Sec. 1: N/2NW/4	80
Sec. 28: W/2SW/4	80		Sec. 15: W/2SW/4	80
Sec. 29: W/2NE/4	80		T25N R9W, N.M.P.M.	
Sec. 32: E/2NE/4	80		Sec. 26: NW/4SE/4	40
Sec. 33: N/2	320		Sec. 35: SW/4	160
Sec. 34: NE/4NW/4	40		T24N R6W, N.M.P.M.	
T30N R15W, N.M.P.M.			Sec. 1: Lots 1, 2, 3, 4	
Sec. 1: N/2N/2	160		(N/2N/2N/2)	45
Sec. 17: SW/4SW/4	40		T23N R7W, N.M.P.M.	
Sec. 18: SE/4SE/4	40		Sec. 12: Lots 1, 2, 3	
Sec. 19: NE/4NE/4, N/2SE/4NE/4,			(NE/4SW/4, S/2SW/4)	112.7
N/2S/2SE/4NE/4	70		Sec. 14: S/2S/2	160.0
Sec. 20: NW/4NW/4,			TOTAL	4093.94

List of Public Land Withdrawals Reviewed In Last Five Years

<u>WITHDRAWAL #</u>	<u>ACRES</u>	<u>ACRES RECOMMENDED</u>	
		<u>AGENCY</u>	<u>FOR REVOCATION</u>
NM013679	9,560	Bureau of Reclamation (BOR)	1220
NM032449	40	Federal Aviation Agency	None
NM077260	10	BLM	None
NM094367	2,740	BOR	408
NM0384556	80	USFS	None
NM1004	620	BOR	None
NM1999	640	DOE	None
NM10206	1,440	DOE	1120
NM12322	20	BIA	20
NM38783	400	BOR	400
NM42917	157	Public Water Reserve	157
NM44725	17	BLM	17
NM52329	22,187	Dept. of the Army	None
NM52383	40	BOR	40
NM52387	11,300	BOR	2560
NM52389	725	BOR	None
NM54547	3,968	BLM	3968
PLO 6525	8,445	BLM	3275

NOTE: This plan fully addresses the issues of land tenure adjustment in sufficient detail to adjust existing classifications and withdrawals and take other administrative action related to land-use allowances and restrictions. Land classifications completed under the Classification & Multiple-Use Act of 1964 will be modified, continued, or terminated to be consistent with this plan as authorized by Sec. 202 of FLPMA. Withdrawals will be reviewed in accordance with the requirements of Sec. 204 of FLPMA and adjustments shall be made consistent with the needs of the withdrawing agency and within the guidelines of this plan.

Easements Identified for Acquisition

• SMA Access Needs (Program/SMA)

Outdoor Recreation/
 Glade Run Trail System
 Carracas Mesa
 Thomas Canyon
 Wilderness/De-na-zin Wilderness
 Cultural Resources/
 Chaco Outliers Group
 Navajo Refugee Sites
 East Side Rincon Site
 Chacra Mesa Complex
 Farmer's Arroyo Site
 Wildlife/
 The Hogback ACEC
 Reese Canyon Research Natural Area
 River Tracts
 Paleontology/
 Torrejon Fossil Fauna ACEC
 Betonnie Tsosie
 Fossil Forest Research Natural Area

Minerals/Beechatuda Tongue
 Forestry/Laguna Seca Mesa

• Other Access Needs (Range)

<u>Allotment Name</u>	<u>Allotment Number</u>
Delgadito	5107
Four Mile Canyon	5099
Canyon Largo	5106
Waterflow Community	5002
Rivershore	5132
Stevens Arroyo	5004
Flora Vista	5140
Animas	5047
Farmington Glade	5016
Thomas Canyon	5013
Coyote Hill	5015
Jones Canyon	5012
Coalbank Canyon	5011
Frances Mesa	5059
Frances Canyon	5062

APPENDIX 3

Implementation of ORV Designations

OVERVIEW

The purpose of this appendix is to provide general information about Bureau of Land Management policy and procedures for off-road vehicle (ORV) designations. BLM Manuals 8341 and 8342 contain a more complete discussion.

OBJECTIVES

All public lands must be designated as "open," "limited," or "closed" to motorized vehicle use to meet public demand or needs, to protect resources and the safety of public land users, and to minimize conflicts among the various public land users and adjacent land owners. Additionally, existing ORV designations are evaluated and revised, if necessary, whenever existing Management Framework Plans (MFPs) are amended or when Resource Management Plans (RMPs) are prepared, revised, or amended.

POLICY

ORV designations are completed as an integral part of the normal BLM planning system unless problems or conflicts preclude adhering to the planning schedules.

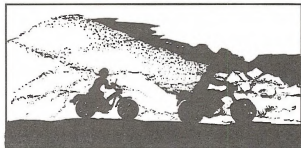
ORV designation allocations are not contingent on the BLM land use planning system.

Notices of ORV designations are published in the Federal Register within one year after completion of decisions allocating ORV use.

Designations apply to all motorized vehicles as defined by 43 CFR 8340.0-5(a) regardless of how the vehicles are being used. Only those vehicles excluded from that definition are allowed in closed areas or limited areas where use is prohibited by designation order. Necessary non-emergency use associated with BLM licenses, leases, permits, or sales may be authorized as an exclusion from that defini-

tion (see 43 CFR 8340.0-5(a) (3)) only if feasible alternatives have been exhausted and the use is compatible with established resource management objectives. Reasonable restrictions on the types of vehicles, time of use, routes, or amount of use may be required in the authorization. Requests for mineral exploration or development access under the 1872 mining law are allowed but are subject to 43 CFR 3802 and 3809.

"Open" designations are used for intensive ORV use areas where there are no special restrictions or areas where no compelling resource protection needs, user conflicts, or public safety issues exist that warrant limiting cross-country travel.



The "limited" designation is used where vehicular use must be restricted to meet specific resource management objectives. Examples of limitations include: number or types of vehicles, time or season of use, permitted or licensed use only, use limited to existing roads and trails, use limited to designated roads and trails, or other limitations necessary to meet resource management objectives (including certain competitive or intensive use areas which have special limitations).

Areas or trails are designated "closed" if closure to all vehicular use is necessary to protect resources, promote visitor safety, or reduce user conflicts.

Brochures (with maps) and other public information and educational tools (such as news releases, articles, talks to groups, environmental and resource education, etc.) inform users of opportunities and

restrictions; on-site placement of signs are used to supplement these tools. Signs should be restricted to marking specific problem areas and major entry points.

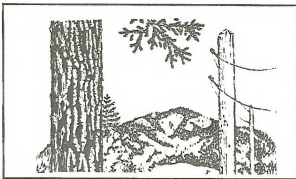
DESIGNATION METHODOLOGY

Needs and concerns for resource protection, promoting public safety, and reducing user conflicts associated with motorized vehicle use on public lands are identified by BLM personnel and through public involvement efforts. Resource Management Planning (RMP) criteria guide policy and manual direction fulfillment. The BLM assembles the appropriate data to justify ORV designations and completes new inventories when existing information is insufficient to resolve problems. The ORV designations are allocated in the formulation of RMP alternatives and decided in the selection of the preferred alternative. After approval of the selected RMP, a designation order is published in the Federal Register and entered in the District Designation Order Register. Implementation Plans are then developed to define and document a specific course of action necessary to carry out the ORV allocation decision. Implementation Plan recommendations are either implemented or included in Activity Plans for further planning consideration.

IMPLEMENTATION PLAN GUIDELINES

The implementation plan is an internal BLM document providing guidance to District and Resource Area managers on how to implement RMP decisions. It defines and documents a specific course of action necessary to achieve ORV designation decisions.

By definition, the implementation plan is brief and more concise than an activity plan. It identifies only those actions that are essential to implement the ORV designation decisions. If activity plans are developed, the information from implementation plans are incorporated into them. However, the ORV implementation plan remains a separate entity to provide continuity for management programming, budgeting, program support and to respond to public requests. A copy is maintained at the District and Resource Area offices.



The plan should contain the following information:

- a map and narrative clearly showing the area's designation(s), the reasons for the designation(s), and any additional information needed to ensure public knowledge and understanding of the reasons for the designations. Design, scale, and format of maps are dependent on the detail needed to ensure adequate interpretation.
- the brochures and maps needed to notify the public of the ORV designations.
- the strategy for boundary, general information, and directional signing and the number, type, and location of signs.
- the number, type, and location of physical constraints, such as barriers, fences, gates, ditches, etc.
- public notices needed to inform the public about details of designations (such as announcements on radio or television, newsletters, letters to key interest groups, and public meetings).
- an installation schedule for signs and physical constraints.
- methods and schedules for supervising motorized field procedures and arrangements needed to enforce compliance with ORV designation decisions including cooperative agreements, user group assistance, trespass notices, citations, arrests, or other actions.
- maintenance standards for signs and physical constraints.
- estimates of all costs, work months, and personnel needed to meet implementation requirements.

EMERGENCY LIMITATIONS OR CLOSURES

Limitations of use or closure of areas and trails on public lands to motorized vehicle use under the authority of 43 CFR 8341.2 are not ORV designations.

Whenever the authorized officer determines that motorized vehicle use will cause or is causing considerable adverse effects on resources (soil, vegeta-

tion, wildlife habitat, cultural, historic, scenic, recreation, or other resources), the area must be immediately closed to the type of use causing the adverse effects (see 43 CFR 8341.2). Emergency limitations or closures are not used if there is sufficient time to complete standard or interim designations. They must remain in force only until one of those designations can be made or until the adverse effects are eliminated and measures to prevent their recurrence have been implemented (whichever occurs first). The steps in emergency closure are listed in Table A3-1.

TABLE A3-1: STEPS IN THE EMERGENCY CLOSURE PROCESS

STEP	ACTION	RESPONSIBILITY
Problem Identification	Identify and briefly document the problem that is causing considerable adverse effect.	As assigned
Analysis	Briefly document the adverse effects.	As assigned
Decision	Complete and publish the emergency order in the Federal Register.	District Manager
Implementation	Post the affected area and notify the affected persons at the earliest date possible, using the most effective means available.	As assigned

NOTE:

The actions noted above could be completed in a very short time frame, a matter of hours, if necessary.

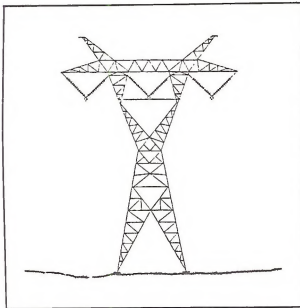
A record of the problem identification, analysis, closure order, and action taken to inform the public is maintained in the District office and is available for public review. The closure or limitation is entered in the District Designation Order Register.

APPENDIX 4

Right-of-Way Windows Concept

In 1974, the BLM did an extensive study called "The Need For A National System Of Transportation and Utility Corridors" (USDI, BLM 1975). After examining compatibility factors for various types of utility and transportation ROWs, it was concluded that narrow fixed-boundary corridors were unfeasible for a national system.

In 1979, the Western Utilities Group, an organization of investor-owned utilities in 11 western states, became concerned that much of the public lands were to receive forms of designation which would preclude ROWs intended to support energy and resource development (e.g. wilderness). They felt that the corridors called for in Section 503 of FLPMA should be designated so that their future use for ROWs could be preserved.



In April 1980, representatives from the BLM New Mexico and Arizona State offices and the Regional Forest Service office met in Albuquerque with representatives from the utility industry of New Mexico and Arizona. After discussing the problems associated with joint-use corridors and the needs of both industry and government, it became clear that both industry and the BLM had several important con-

cerns. First, there was the need of all parties to retain flexibility in their planning. In addition, the smaller utilities such as the electric cooperatives and small pipeline interests became alarmed that they would be excluded from the process and the public lands closed to their uses. Further, industry representatives were extremely interested in protecting vital window areas, (e.g. constraining areas such as topography, land status, etc., which were essential to routing of the utility).

In the process of developing an approach to ROW planning, the conventional linear concept of corridors was undertaken. While linear corridors are easily visualized, and derive their apparent value from this intuitive sense of what a corridor is, the linear concept has inherent disadvantages:

1. If either the origin or the destination or both do not fall within the corridor, it may be of limited or no use.
2. Linear corridors do not recognize the broken patterns of land ownership which are the rule in the Farmington Resource Area. Designation of a linear corridor on public lands might dictate uses on non-BLM lands and would result in de facto BLM management of these lands. Further, identification and designation of linear corridors could affect land uses and property values of private lands.
3. Discussions with industry have already revealed their expectation that linear corridor designation is virtually a pre-approval of any application for a ROW within the corridor. This is not the meaning or intent of corridor designation, but the impression is difficult to avoid.
4. Linear corridor designation often fails to provide for future needs, since sources and markets are constantly changing.
5. The continuity of linear corridor designation does not correspond to the "checkerboard" pattern of land ownership which is common in the southern two-

thirds of the Farmington Resource Area. If a corridor is designated into or across a non-condemnable land status such as Tribal Trust lands, utility companies would not be able to condemn that parcel if negotiations should fail.

As a result of the difficulties of the linear concept, the RMP team utilized a window approach to corridor planning which would satisfy both industry and Bureau needs and concerns. The idea behind the window concept is to identify strategic areas which are needed for right-of-way locations. Stipulations or management prescriptions are then designed to eliminate actions (such as buildings, airstrips, or surface mining) which would conflict with rights-of-way inside those windows.

Advantages to the window approach include the following:

1. Critical access (windows) would be protected; sensitive areas would be identified for ROW avoidance (these are primarily Special Management Areas - see Appendix 1); performance criteria would be known to industry and incorporated into their long-range planning.

2. Use of windows and avoidance of sensitive areas would limit proliferation of ROWs in ways that make sense to the public and to industry.

3. Reasonable flexibility would be retained; industry could design its own routes in response to source-to-market needs.

4. Window designation has less potential of creating a presumption of use over non-BLM administered lands.

5. Cost and time of processing ROW applications would be reduced.

6. Industry would be provided with early identification of sensitive areas, as well as requirements relating to their applications.

7. This approach achieves better consideration of multiple-use factors while reducing environmental impacts.

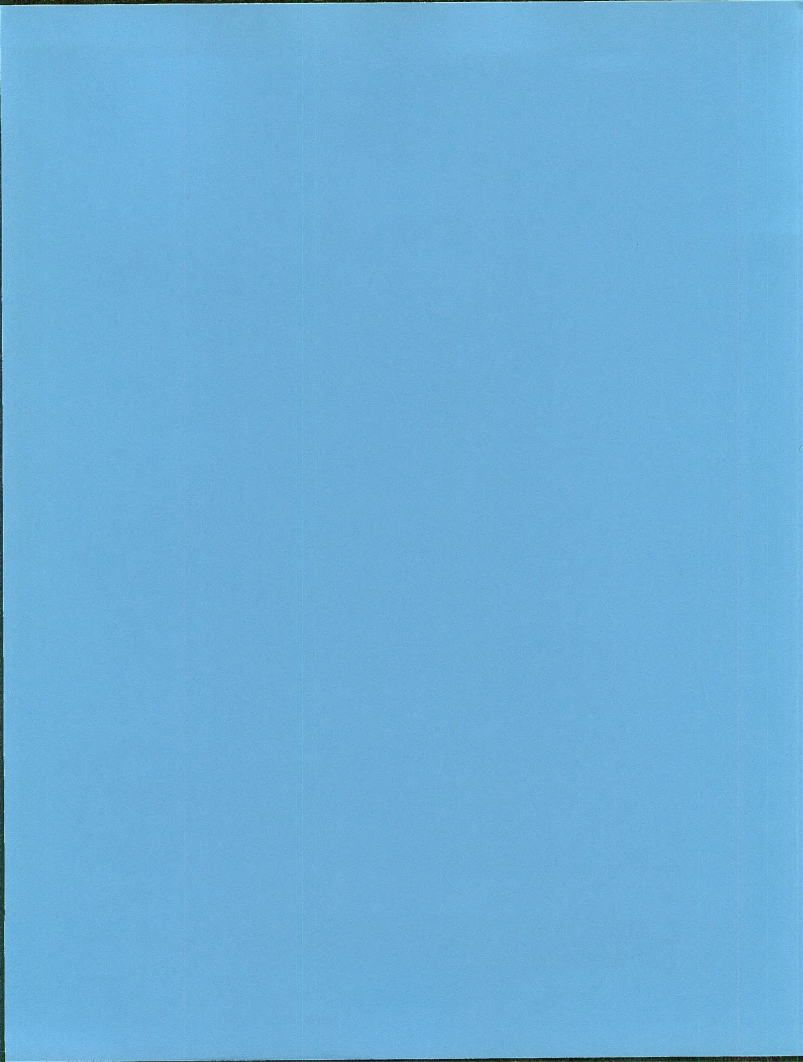
8. This approach would provide for identification and consideration of industry's needs regardless of the size of the company or project.

It is important to note that lands which are not designated as unsuitable for right-of-way purposes are to be considered as open for rights-of-way across public lands and will receive case-by-case environmental analysis to ensure compliance with the National Environmental Policy Act.



Glossary





Glossary

ACTIVITY PLAN - A more detailed and specific management plan for a single resource program or plan element undertaken to implement the more general Resource Management Plan decisions. An activity plan is prepared for specific areas to reach specific resource management objectives within stated timeframes. Detailed management actions, including such things as projects, treatments, other on-the-ground activities, and schedules are described in the document. Activity planning is the third tier in the BLM planning system. Examples include Allotment Management Plans, Cooperative Management Plans, Cultural Resources Management Plans, Recreation Area Management Plans, Transportation Plans, and Habitat Management Plans. Activity plans implement decisions made in the Resource Management Plan.

ACTUAL USE - Use made of forage on any area by livestock and/or wildlife without reference to permitted or recommended use.

ALLOTMENT - An area of land where one or more permittees graze their livestock. Generally consists of public lands but may include parcels of private or state lands. The number of livestock and season of use are stipulated for each allotment. An allotment may consist of several pastures or be any one pasture.



ALLOTMENT CATEGORIZATION - Maintain (M); Improve (I); Custodial (C). The system that allows for implementing grazing management based on the need for management and the potential for improved range condition, with consideration for cost-effectiveness.

ALLOTMENT MANAGEMENT PLAN (AMP) - An activity plan which applies to livestock grazing on the public lands, prepared in consultation, cooperation, and coordination with the permittee(s), lessee(s), or other affected interest.

ALLUVIAL/ALLUVIUM - Pertaining to material that is transported and deposited by running water.

ALTERNATIVE - The different ways of addressing the planning issue(s) and management activities considered in the planning process. These provide the decisionmaker and the public a clear basis for choices among options. Every planning effort involves the development of several complete, reasonable alternatives for resolving the issue(s). One of the alternatives offered is the continuation of present management (no change) while the other alternatives provide a range of choices for resolution of the issues. One of the alternatives is selected at the end of the planning process and approved as the plan.

ANIMAL UNIT (AU) - Considered to be one mature cow (1,000 pounds) or its equivalent based upon average daily forage consumption of 26 pounds of dry matter per day.

ANIMAL UNIT MONTH (AUM) - The amount of forage necessary for the sustenance of one cow (animal unit) or its equivalent for a period of one month; also a unit of measure of "grazing preference."

AQUIFER - A geologic formation that contains sufficient saturated permeable material to yield a usable quantity of water to wells or springs.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) - An area where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, to fish and wildlife resources, or to other natural systems or processes, or to protect persons from natural hazards.

AUTHORIZED OFFICER - Any person authorized by the Secretary of the Interior, or his representative, to administer regulations.

AUTHORIZED LIVESTOCK GRAZING USE - That portion of the livestock grazing preference or allowable livestock grazing use authorized to be used during a grazing year.

BROWSE - Trees and shrubs whose twigs, leaves, or fruit are eaten by wildlife or livestock.

CANDIDATE SPECIES - Species identified by the U.S. Fish and Wildlife Service as appropriate for listing as threatened or endangered.

CARRYING CAPACITY - The maximum stocking rate possible in a given environment which can be maintained without inducing damage to vegetation or related resources. Carrying capacity may vary annually in the same area due to fluctuating weather conditions and forage production.

CHAINING - A method of creating openings in pion-juniper woodlands by pulling an anchor chain between two tractors, knocking over or uprooting the trees.

COAL SCREENS - The series of analyses performed during the federal coal lands review process. The screens are: coal development potential, unsuitability criteria, multiple use, and surface owner consultation as defined in 43 CFR 3420.

COAL UNSUITABILITY CRITERIA - Regulations developed by the BLM, OSM, or mandated by SMCRA which use the ability of an area's surface resources to accept or absorb the impact of coal mining activities as a means to determine

the suitability or unsuitability of the area for coal mining as defined in 43 CFR 3461.

CONTINENTAL DIVIDE NATIONAL SCENIC TRAIL TREADWAY - The actual trail established and marked as the route of the Continental Divide National Scenic Trail. It can exist as part of the Continental Divide National Scenic Trail system only after formal designation by the appropriate agency head and publishing a notice in the Federal Register.

CONTRAST - Opposition or dissimilarity of different forms, lines, colors, or textures in a landscape.

COOPERATIVE MANAGEMENT PLAN (CMP) - Written plans designed to enhance range condition by improving livestock distribution and providing the proper use and periodic rest of available forage on public lands. These plans specify goals and objectives for grazing management and the steps required to attain the desired results on individual allotments.

CRITICAL HABITAT FOR THREATENED OR ENDANGERED PLANT OR ANIMAL SPECIES - Areas officially designated by the U.S. Fish and Wildlife Service. There are none in this planning area.

CULTURAL RESOURCE INVENTORY:

CLASS I - An existing data survey. This is an inventory of a study area: (1) to provide a narrative overview of cultural resources by using existing information and (2) to compile existing cultural resources site record data on which to base the development of the BLM's site record system.

CLASS II - A sampling field inventory. This is designed to locate from surface and exposed profile indications all cultural resource sites within a portion of an area so that an estimate can be made of the cultural resources for the entire area. The Class II inventory is to be used where an intensive field inventory (Class III) is not practical or necessary.

CLASS III - An intensive field inventory. This is designed to locate from surface and exposed profile indications all cultural resource sites in an area. Upon its completion, no further cultural resource inventory work is normally needed. A Class

III inventory is appropriate for small project areas, all areas to be disturbed, and primary cultural resource areas.

CULTURAL RESOURCE MANAGEMENT PLAN (CRMP) - A written and officially approved plan for an area or a group of resources. It identifies cultural resources protection and use objectives, and outlines procedures for evaluating accomplishments.

CULTURAL RESOURCES - Fragile and non-renewable remains of human activity, occupation, or endeavor. They are reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural resources that were of importance in human events. These resources consist of: (1) physical remains, (2) areas where significant human events occurred, even though evidence no longer remains, and (3) the environment immediately surrounding the resource.



CUMULATIVE IMPACT - The environmental impact resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions, regardless of the agency (federal or non-federal) or person(s) undertaking other actions. Cumulative impacts can result from individual minor, but collectively significant, actions taking place over a period of time.

CURRENT AUTHORIZED USE - Current active grazing preference (in Animal Unit Months).

DISPERSED RECREATION - Pleasure-seeking activities which occur over wide areas. Density of use is normally low and facility developments are minimal.

EASEMENT - A document that ensures access across a described parcel of land along a described route and which encumbers the land.

ECOLOGICAL CONDITION - The present state of vegetation of a range site in relation to the climax (natural potential) plant community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the climax plant community for the site.

ECOLOGICAL CONDITION CLASS - Four classes are used to express the departure of the present plant community from the climax plant community; expressed as a percentage.

Class	Percent Resemblance
Excellent	76-100
Good	51-75
Fair	26-50
Poor	0-25

ECOLOGICAL CONDITION RATING - A rating based on the departure from the climax plant community of the present plant community.

ECOSYSTEM - An interacting natural system including all the component organisms together with its non-living environment.

EMERGENCY LEASING - Emergency coal leases may be issued in response to an application as outlined under 43 CFR 3425.1-4. Briefly, an emergency lease may be issued if the coal reserves are part of a mining operation that is producing coal and either: (1) the federal coal is needed within three years to maintain an existing mining operation, or (2) if the coal deposits are not leased, then they would be bypassed, and if leased, some of the coal on the tract would be used within three years.

ENDANGERED SPECIES - Federally listed - Any animal or plant species in danger of extinction throughout all or a significant portion of its range. State (Group I) - Species whose prospect of survival or recruitment in the state are in jeopardy in the foreseeable future. State (Group II) - Species whose prospect of survival or recruitment within the state may become jeopardized in the foreseeable future.

ENERGY MINERALS ACTIVITY RECOMMENDATION SYSTEM (EMARS) - Established by the 1975 Coal Management

Program, it has three phases: (1) nomination and programming, (2) scheduling, and (3) leasing.

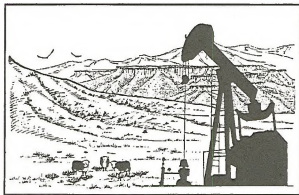
ENVIRONMENTAL ASSESSMENT (EA) - A concise document that serves to: (1) briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; (2) aid an agency's compliance with the National Environmental Policy Act (NEPA) when no environmental impact statement is necessary; (3) facilitate preparation of a statement when one is necessary. An EA includes brief discussions of the need for the proposal, of alternatives as required by Section 102(2) of NEPA, of the environmental impacts of the proposed action and other alternatives, and a listing of agencies and persons consulted.

ENVIRONMENTAL IMPACT STATEMENT (EIS) - Version of the statement of environmental effects required for major federal actions under Section 102 of NEPA and released to the public and other agencies for comment and review. It is a formal document that must follow requirements of NEPA, CEQ guidelines, and directives of the agency responsible for the proposed project or plan.

EPHEMERAL STREAM - A stream or portion of a stream which flows only in direct response to precipitation. Such flow is usually of short duration.

EROSION - The detachment and/or movement of soil or rock by water, wind, ice, gravity, or other natural causes.

EXCAVATION - Controlled scientific removal of artifacts and recording of data from subsurface cultural resource deposits.



EXCHANGE ZONE - An identified area in which a large portion of the federal lands may be suitable for adjustment through exchange, sale, withdrawal, R&PP etc. In these areas an overall reduction of federal acreage would be allowed with exchange as the preferred method of adjustment. All lands to be adjusted would still have to meet Federal Land Policy and Management Act disposal criteria. Not all lands in the exchange zone may be suitable for adjustment as determined through the normal processing of each individual proposal.

EXTENSIVE RECREATION MANAGEMENT AREA - In these areas, significant recreation opportunities and problems are limited and intensive recreation management is not required. Minimal management actions are adequate.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA) - Establishes public land policy for management of lands administered by the BLM. FLPMA specifies several key directions for the Bureau, notably that: management be on the basis of multiple use and sustained yield; land use plans be prepared to guide management actions; public land be managed for the protection, development, and enhancement of resources; public lands generally be retained in federal ownership; and public participation be included in reaching management decisions.

FREE SIMPLE TITLE - An estate in which the owner is entitled to the entire property with unconditional power of disposition.

FORAGE - All browse and herbaceous foods that are available to grazing animals; may be grazed or harvested for feeding.

FORAGE VIGOR - The relative health and wellbeing of a plant as reflected by its ability to manufacture sufficient food reserves for growth, maintenance, and reproduction.

FORB - Any herbaceous non-woody plant that is neither a grass nor grass-like plant. Many are used by livestock and/or wildlife.

FULL FIRE SUPPRESSION - The policy of taking aggressive action to contain all fires within a given area by 10 a.m. of the day following ignition.

GRAZING PREFERENCE - The total number of animal unit months of livestock grazing on public lands apportioned and attached to base property owned or controlled by a permittee lessee.

GRAZING SYSTEM - A systematic sequence of grazing use and non-use of an allotment to reach identified multiple use goals or objectives by improving the quality and quantity of the vegetation.

GROUND COVER (SOIL) - Material covering soil and providing protection from, or resistance to, impact of raindrops, expressed in percent of area covered. Composed of vegetation, litter, erosion pavement, and rock.

HABITAT - The sum total of environmental conditions of a specific place occupied by a wildlife species.

HABITAT MANAGEMENT PLAN (HMP) - Written and officially approved plan for a specific geographic area which identifies wildlife habitat and related objectives, establishes consequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

HABITAT SITE - A local ecosystem defined specifically by existing homogenous vegetation and local landform and influenced by regional physiography and intraregional association. The habitat site is the lowest classification level of the BLM's habitat inventory system.

HARDROCK MINING - Underground or open-pit mining, generally associated with locatable minerals.

HUNDRED YEAR FLOOD PLAIN - Defined as that area of land that has a one percent chance of being inundated during any given year.

INTERDISCIPLINARY TEAM - The group of Resource Area and District specialists responsible, along with the core team, for the preparation of the Resource Management Plan.

ISSUE - A matter of controversy over resource management activities that is typically discrete and provides alternatives for a decision. Typically the causal relationship between the activity and un-

desirable results is documentable and the level of controversy is high enough to merit further analysis. Statement of the planning issue orients the resource management planning process so the vigor of interdisciplinary thought, analysis, and documentation is directed toward resolving the planning issues during the preparation of a Resource Management Plan.

JACAL - The wattle and daub construction method used in some above-ground cultural site structures.

KNOWN GEOLOGIC STRUCTURE (KGS) - A trap in which an accumulation of oil and gas has been discovered by drilling and which is determined to be productive. Its limits include all acreage that is presumptively productive [43 CFR 3100.0-5(a)]. Lands underlain by a KGS may be leased only through a competitive system.

KNOWN RECOVERABLE COAL RESOURCE AREA (KRCRA) - Area that includes federal lands that meet minimum standards for recoverable coal in accordance with accepted mining practices, as determined by the Director of the USGS. The federal lands in a KRCRA are classified for coal leasing.

LAND OWNERSHIP ADJUSTMENT - Changes made in the ownership pattern of public lands in order to adjust a Resource Area land base. The purpose of these changes is to improve the management of public, private, and state lands.

LAND WITHDRAWALS - The removal or withholding of public lands by statute or secretarial order from operation of some or all of the public land laws.

LEASEABLE MINERALS - Those minerals or fluids that can be acquired under lease from the federal government. They include oil, gas, geothermal energy, coal, phosphate, sodium, potash, oil shale, sulfur, and all minerals on acquired lands.

LEGAL ACCESS - The right of access to public lands by all modes or routes of travel which do not violate any law or regulation.

LICENSED USE - Active use AUMs that a permittee has paid for during a given grazing period.

LIMITED FIRE SUPPRESSION - The policy which allows fire suppression activities to be dictated by prescribed fire parameters, i.e. temperature, fuels, wind, humidity, etc., to meet natural resource management objectives. Some areas may also have restrictions on the types or intensities of fire suppression activities allowed, e.g. equipment restrictions in order to protect other resource values.

LOCATABLE MINERALS - Minerals or mineral materials subject to disposal under the Mining Law of 1872 (as amended). These generally include metallic minerals of high intrinsic value, such as gold and silver, and other uncommon varieties not subject to lease or sale, such as sodium bentonite, high-calcium limestone, perlite, and uranium.

LOGICAL MINING UNIT - An area of land in which the recoverable coal reserves can be developed in an efficient, economical, and orderly manner as a unit, with due regard for the conservation of recoverable coal reserves and other resources.

LOWER SONORAN LIFE ZONE - The life zone which extends from an elevation of about 2,800 to 5,000 feet. The major floral type is desert shrub.

MAJOR LAND RESOURCE AREA (MLRA) - Large geographic areas of land characterized by particular patterns of soil, climate, water resources, and land use.

MANAGEMENT FRAMEWORK PLAN (MFP) - A planning decision document that established land use allocations, coordination guidelines for multiple use, and management objectives for each class of land use or protection for a given planning area. It was the BLM's land use plan. An MFP was prepared in three steps: (1) resource recommendations, (2) impact analysis and alternative development, and (3) decision making. Since 1982, BLM land use plans have been developed under an altered planning system called Resource Management Plans (RMPs).

MANAGEMENT SITUATION ANALYSIS (MSA) - An unpublished companion document to this RMP that provides the background documentation for the development of alternatives.

MINE PLAN - A plan of operation which details how a coal lease will be mined and the area reclaimed. It is prepared in order to obtain a mine permit.

MINERAL ENTRY - The occupation of a tract of land for the express purpose of exploring for and extracting mineral materials.

MINERAL ESTATE (MINERAL RIGHTS) - The ownership of all minerals, including all rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

MITIGATION - The alleviation or lessening of possible adverse effects of an action upon a resource by application of appropriate protection measures or adequate scientific study.

MULTIPLE USE - The management of the public lands and their various resource values so that they are used in the combination that will best meet the present and future needs of the American people. These resources include, but are not limited to, recreation, range, timber, minerals, watershed, wildlife, and fish, as well as natural, scenic, scientific, and historical values. The goal of multiple use is the harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment. Consideration is given to the relative values of the resources, but not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output (see the Federal Land Policy and Management Act).

NATIONAL HISTORIC LANDMARK - A designation established by The Historic Sites Act of 1935. That Act gave the Secretary of the Interior responsibility for systematically identifying resources which by historic association, architectural or design excellence, or extraordinary information content are nationally significant. Landmarks include districts, sites, buildings, structures, and objects pivotal in national history, architecture, archeology, or culture. Criteria for landmark status parallel to some degree those of the National Register of Historic Places, but the associative, architectural, aesthetic, or informational quality required is significantly greater and must pertain to the nation rather than to a single place or group of people.

NATIONAL NATURAL LANDMARK - A specific area designated by the Secretary of the Interior which contains a representative example(s) of the nation's natural history. It can include terrestrial communities, aquatic communities, landforms, geological features, or habitats of native plant and animal species. A landmark must possess national significance in illustrating or interpreting the nation's natural heritage.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP) - The official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation. The Register lists archeological, historic, and architectural properties (i.e. districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state or federal agencies and approved by the National Register staff.

NO SURFACE DISTURBANCE - Prescribed on a case-by-case basis when the activity plan for an area is developed. In general, an activity would be allowed as long as it does not interfere with the management objectives of the area.

NO SURFACE OCCUPANCY - A fluid mineral (i.e. oil and gas) leasing stipulation that prohibits occupancy or disturbance of all or part of the lease surface in order to protect special values or uses. Lessees may exploit the oil and gas or geothermal resource in this lease by directional drilling from sites outside the no surface occupancy area.

NON-COMPETITIVE SALE - Land sales made at fair market value without competitive bidding.

NON-GAME SPECIES - Wildlife species which are protected by law from sport or commercial harvest.

NON USE - Allowable livestock grazing use (in AUMs) that is authorized but not to be used during a given time period. Non use is applied for and authorized on an annual basis.

OFF-ROAD VEHICLE (ORV) - Any motorized vehicle capable of or designed for travel on or immediately over natural terrain. Excluded are: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, or law enforcement

vehicle when used for an emergency; (3) any vehicle with expressed official approval; (4) vehicles in official use; and (5) combat or combat support vehicles used during a national defense emergency.

OFF-ROAD VEHICLE (ORV) DESIGNATIONS - LIMITED, CLOSED, OPEN:

ORV CLOSED - "Closed" areas and trails are designated areas and trails where the use of motorized vehicles (except by authorized users) is permanently or temporarily prohibited.

ORV LIMITED - "Limited" areas and trails are designated areas and trails where the use of motorized vehicles is subject to restrictions deemed appropriate by an authorized officer. Restrictions may limit the number or types of vehicles allowed, dates and times of use, and similar matters. "Limited" areas and trails may be designated for special or intensive use such as organized events and may be subject to, but not limited to, rules set forth in 43 CFR 8341.2.1. ORV use related to mining claim operations will not be restricted, except by regulations and requirements found in 43 CFR 3809, as amended on March 2, 1983. ORV use performed in conformance with existing leases, permits, rights-of-way stipulations, or other land-use authorizations will not be impinged upon.

ORV OPEN - "Open" areas and trails are designated areas and trails where motorized vehicles may be operated subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8343.

OUTSTANDING NATURAL AREA (ONA) - Areas of outstanding scenic splendor, natural wonder, or scientific importance that merit special attention and care in management to ensure preservation in their natural condition. These areas are usually undisturbed, and may contain rare botanical, geological, or zoological values which are of interest for scientific research purposes. Access roads and public use facilities are normally located on the periphery of the area.

PALAEONTOLOGY - Science dealing with life and past geological periods as known from fossil remains.

PATENT - A grant made to an individual or group conveying fee simple title to the public lands.

PATENTED CLAIM - A claim on which title has passed from the federal government to the mining claimant under the Mining Law of 1872.

PAYMENT IN LIEU OF TAXES (PILT) - Payments received by individual counties from the federal government for federal lands within the counties. Total federal acreage and population are used to determine the funding levels.

PERENNIAL STREAM - A stream or portion of a stream which flows continuously throughout the year.

PERMITTEE - One who holds a permit to graze livestock on public land. Most of the public lands in the FRA are permitted.

PETROGLYPH - Picture or hieroglyph incised or carved into a surface, usually stone. Petroglyphs are scattered throughout the FRA.

PLANNING CRITERIA - The standards developed by the manager and an interdisciplinary team for their use in forming judgments about decisionmaking, analysis, and data collection during planning. They streamline and simplify the subsequent prescribed resource management planning actions by setting forth the standards for making decisions in each of the prescribed planning actions.

POTHUNTING - Slang term used by professional archeologists to describe illegal or non-professional relic collecting.



PREFERENCE RIGHT LEASE - Right of applicant to apply for resources in public lands noncompetitively. For example, an applicant who had discovered a mineral deposit under a prospecting permit might be allowed a preference right lease over any other lease applicant.

PROPER USE - The proper level of forage utilization that allows for the maintenance or improvement of ecological condition.

PUBLIC LANDS - Any land and interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except:

- lands located on the Outer Continental Shelf

- lands held for the benefit of Indians, Aleuts, or Eskimos

- lands in which the United States retains the minerals, but surface is private.

PUBLIC ROAD - All roads and highways, except private roads, established in pursuance of any law of New Mexico, and roads dedicated to public use, that have not been vacated or abandoned, and such other roads as are recognized and maintained by the corporate authorities of any county in New Mexico. Examples of public roads are state or federal highways, county roads or municipal streets.

RANCH BUDGET - An itemized summary of the expenditures and receipts of a typical ranch operation.

RANGE IMPROVEMENT - Structure, development, or treatment used to rehabilitate, protect, or improve public lands to enhance range resources.

RANGE SITE - A distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community, is the product of all environmental factors responsible for its development, and is capable of supporting a native plant community typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production.

RANGE TREND - The change in vegetative and soil characteristics as a direct result of environmental factors, primarily climate and grazing. Range trend studies are used in combination with other studies to evaluate the results of grazing management.

RANGELAND MONITORING PROGRAM - Program designed to measure changes in plant composition, ground cover, animal populations, and climatic conditions on public rangeland. Vegeta-

tion studies, used to monitor changes in rangeland condition and determine reason for any changes that are occurring, consist of actual use, utilization, trend, and climatic conditions.

RAPTOR - Any predatory bird, such as a falcon, hawk, eagle, or owl, that has feet with sharp talons or claws adapted for seizing prey and a hooked beak for tearing flesh.

RECLAMATION - The process of returning disturbed lands to their original form and productivity.

RECREATION AND PUBLIC PURPOSES ACT (R&PP ACT) - An Act which authorizes the Secretary of the Interior, under specific conditions, to sell or lease public domain lands to state and local governments for recreation and other public purposes, or to qualified non-profit organizations, for public or quasi-public purposes, such as recreation, education, and health.

RECREATION OPPORTUNITY SPECTRUM (ROS) - A framework for stratifying and defining classes of outdoor recreation opportunity environments.

RESearch NATURAL AREA (RNA) - An area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: (1) a typical representation of a common plant or animal association; (2) an unusual plant or animal association; (3) a threatened or endangered plant or animal species; (4) a typical representation of common geologic, soil, or water features; (5) outstanding or unusual geologic, soil, or water features.

RESOURCE MANAGEMENT PLAN (RMP) - A land use plan as described by the Federal Land Policy and Management Act. The Resource Management Plan generally establishes in a written document: (1) land areas for limited, restricted, or exclusive use; designation, including Areas of Critical Environmental Concern designation; and transfer from BLM administration; (2) allowable resource uses (either singly or in combination) and related levels of production or use to be maintained; (3) resource condition goals and objectives to be attained; (4) program constraints and general management practices needed to achieve the above items; (5) need for an area to be covered by more detailed and

specific plans; (6) support actions, including such measures as resource protection, access, development, realty action, cadastral survey, etc., as necessary to achieve the above; (7) general implementation sequences, where carrying out a planned action is dependent upon prior accomplishment of another planned action; and (8) intervals and standards for monitoring and evaluating the plan to determine the effectiveness of the plan and the need for amendment or revision. It is not a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations.

RETENTION ZONE - All areas of the Farmington Resource Area which are not identified for exchange or some other method of disposal. Special Management Areas outside the retention zone will also be retained and managed by the BLM. The primary goal in this zone is to consolidate land ownership patterns through state and private exchanges.

RIGHT-OF-WAY AVOIDANCE AREAS - Areas in which rights-of-way will be prohibited due to sensitive resources or other reasons.

RIGHT-OF-WAY (ROW) CORRIDORS - A narrow band of land designated for the placement of transmission lines.

RIGHT-OF-WAY (ROW) WINDOWS - Areas critical for transmission line placement due to topographic, land ownership or other constraints in the area.

RIPARIAN HABITAT OR AREA - A zone of transition from the aquatic to terrestrial ecosystems, whose presence is dependent upon surface and/or subsurface water, and which reveals through its existing or potential soil vegetation complex the influence of that water. Riparian habitat may be associated with features such as lakes, reservoirs, estuaries, potholes, springs, bogs, wet meadows, muskegs, and ephemeral, intermittent or perennial streams.

SALEABLE MINERALS - Common variety mineral materials (sand, gravel, etc.) which are disposed of by sale by the federal government under the Material Sales Act of 1947 and the Surface Resources Act of 1955.

SCENIC AREA - An area established along highways, roads, trails, or streams which shall be managed to protect and/or enhance the scenic qualities and visual sensitivity that led to the designation of the area.

SCENIC QUALITY RATING - The relative scenic quality (A, B, or C) assigned to a landscape by applying the scenic quality evaluation key factors. A is the highest rating, B is intermediate, and C is the lowest.

SCOPING PROCESS - Early process for determining the scope of issues to be addressed and for identifying significant issues related to proposed actions.

SECTION 3 PERMIT - A permit authorizing grazing use on public lands inside the Grazing District boundary. It is a reference to that section of the Taylor Grazing Act pertaining to land within the District boundary.

SECTION 4 PERMIT - A permit issued by the BLM for the permittee to construct a project on public lands as defined in the Taylor Grazing Act.

SECTION 15 LEASE - A lease authorizing grazing use on public lands outside the Grazing District boundary. It refers to that section of the Taylor Grazing Act pertaining to lands outside the Grazing District boundary.

SEDIMENT YIELD - Amount of sediment given up by a watershed over a specific time period, usually a year. Ordinarily, it is expressed as tons, acre feet, or cubic yards.

SEDIMENTATION - Process of depositing material, such as water depositing suspended soil particles in an area, such as a stream bottom.

SPECIAL MANAGEMENT AREA (SMA) - An area requiring special management by the Bureau of Land Management to protect one or more resource values. An SMA may include non-public lands that the BLM wishes to acquire or to bring under a Cooperative Management Agreement to better manage the valued resource. At a minimum, an activity plan will be prepared for an SMA. SMAs may be given designations under various existing labels such as Area of Critical Environmental

Concern or Research Natural Area. SMAs are not necessarily excluded from development if the development activity does not conflict with the goals for the area.

SPECIAL RECREATION MANAGEMENT AREA - Areas requiring explicit recreation management to achieve BLM's recreation objectives and to provide specific recreation opportunities.

SPLIT ESTATE - Lands where surface and mineral estates have been severed and are under different ownership (i.e. private surface with public minerals).

STATE-LISTED SPECIES - Animals or plants listed by the state of New Mexico as threatened or endangered.

STOCKING RATE - The number of specified kind and class of animals grazing a unit of land for a specified period of time; may be expressed as a ratio.

SURFACE MINING - Mining in surface excavations, including placer mining, mining in open glory-hole pits, mining and removing ore from open cuts by hand or with mechanical excavating and transportation equipment, and the removal of capping or overburden to uncover the ores. Mining at or near the surface is generally done where the overburden can be removed without great expense.

SUSTAINED YIELD - Achievement and maintenance in perpetuity of a high-level annual or regular periodic output of various renewable resources of public lands consistent with multiple use.

THREATENED AND/OR ENDANGERED SPECIES - Plants and animals listed by the U.S. Fish and Wildlife Service or the state of New Mexico as threatened or endangered.

TRACT - A defined area of land which will logically be proposed as a single lease offering. At the preliminary tract stage, the exact boundaries of tracts would still be subject to adjustment based on subsequent analysis.

TRANSECT - The sample area on which inventory data are gathered such as at points along a line or over an area of designated width and length.

TRANSMISSION LINE - Any electrical transmission line of 69 kV capacity or greater or any gas line of 6-inch diameter or greater.

TYPE LOCALITY - The place at which a stratigraphic unit (such as a formation or a series) is typically displayed and from which it derives its name. It contains the type section and is contained within the type area.

UNPATENTED MINING CLAIM - A claim made under the authority of the Mining Law of 1872 on vacant, unappropriated public lands, where valuable locatable minerals have been discovered.

VALID EXISTING RIGHTS - Legal interests that attach to a land or mineral estate that cannot be divested from the estate until that interest expires or is relinquished.

VISUAL RESOURCE MANAGEMENT (VRM) - The system by which the BLM classifies and manages the visual resource of public lands. Based on their scenic qualities, sensitivities, and the distances from which they are viewed, the lands are classified into management units. The system includes actions taken to identify visual values, to establish objectives for managing these values, and to achieve the visual management objectives.

VISUAL SENSITIVITY - The degree of concern expressed by users toward scenic quality and existing or proposed visual change in a particular characteristic landscape.

WILDERNESS - Definition contained in Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891): A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean ... an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000

acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical values.

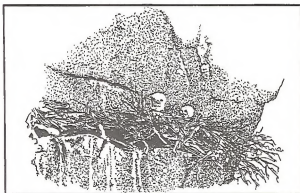
WILDERNESS MANAGEMENT POLICY - Policy document prescribing the general objectives, policies, and specific activity guidance applicable to all designated BLM wilderness areas. Specific management objectives, requirements, and decisions implementing administrative practices and visitor activities in individual wilderness areas are developed and described in the wilderness management plan for each unit.

WILDERNESS STUDY AREA (WSA) - Roadless area of land that has been inventoried and found to have wilderness characteristics as described in Section 603 of FLPMA and Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

WILDLIFE - Includes all species of mammals, birds, amphibians, and reptiles, or their progeny or eggs which, whether raised in captivity or not, are normally found in a wild state. Feral horses and burros are excluded.

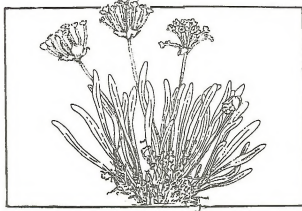
WILDLIFE HABITAT - Sum total of environmental conditions of a specific place occupied by a wildlife species or population of such species.

WITHDRAWAL - Actions which restrict the use of public lands and segregate the lands from the operation of some or all of the public land and mineral laws. Withdrawals are also used to transfer jurisdiction of management to other federal agencies.

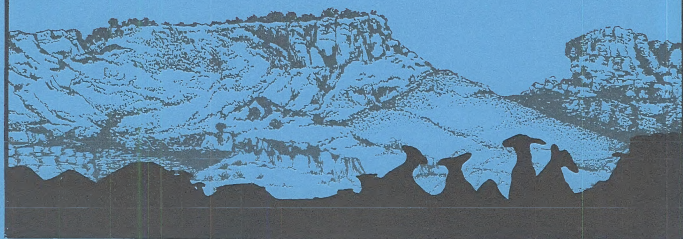


LIST OF ACRONYMS

ACEC Area of Critical Environmental Concern	MFP Management Framework Plan
AIRFA American Indian Religious Freedom Act	NADP National Atmospheric Deposition Program
AMP Allotment Management Plan	NEPA National Environmental Policy Act
APD Application for Permit to Drill, Deepen, or Plugback	NFYF Normal Fire Year Plan
ARPA Archeological Resources Protection Act	NHPA National Historic Preservation Act
AUM Animal Unit Month	NMDGF New Mexico Dept. of Game & Fish
BIA Bureau of Indian Affairs	NMEID New Mexico Environmental Improvement Division
BLM Bureau of Land Management	NMSO New Mexico State Office
BOR Bureau of Reclamation	NOL Not Open to Leasing
CEQ Council of Environmental Quality	NORA Notice of Realty Action
CFR Code of Federal Regulations	NRHP National Register of Historic Places
CMA Cooperative Management Agreement	NSO No Surface Occupancy
C&MU Classification and Multiple Use	NWPS National Wilderness Preservation System
CRMP Cultural Resources Management	NTL Notice to Lessees
DOD Department of Defense	OHV Off-Highway Vehicle
DOE Department of Energy	ONA Outstanding Natural Area
DRMP Draft Resource Management Plan	ORV Off-Road Vehicle
EA Environmental Assessment	OSM Office of Surface Mining or OSMRE (Reclamation and Enforcement)
EAR Environmental Assessment Record	PILT Payment in Lieu of Taxes
EIS Environmental Impact Statement	PLO Public Land Order
EO Executive Order	PL Public Law
EPA Environmental Protection Agency	PRLA Preference Right Lease Application
FERC Federal Energy Regulatory Commission	RAMP Recreation Area Management Plan
FLPMA Federal Land Policy & Management Act	RMA Recreation Management Areas
FPC Federal Power Commission	RMP Resource Management Plan
FRA Farmington Resource Area	RNA Research Natural Area
FY Fiscal Year	ROS Recreation Opportunity Spectrum
HMP Habitat Management Plan	ROW Rights-of-Way
I&E Inspection and Enforcement	R&PP Recreation and Public Purpose
KGS Known Geologic Structure	SCS Soil Conservation Service
MCF Thousand Cubic Feet	SHPO State Historic Preservation Office
MLRA Major Land Resource Areas	SJEIS San Juan Grazing Management Environmental Impact Statement or San Juan Grazing EIS
MMS Minerals Management Service	SJRRCEIS San Juan River Regional Coal EIS
MOU Memorandum of Understanding	SMA Special Management Area
MRI Mineral Resource Inventory	SMCRA Surface Mining Control and Reclamation Act
MSA Management Situation Analysis	SO Secretarial Order
	T&E Threatened and/or Endangered (species)
	USDI United States Department of the Interior
	USFS United States Forest Service
	USFW United States Fish and Wildlife Service
	USGS United States Geological Survey
	VRM Visual Resource Management
	WA Wilderness Area
	WSA Wilderness Study Area



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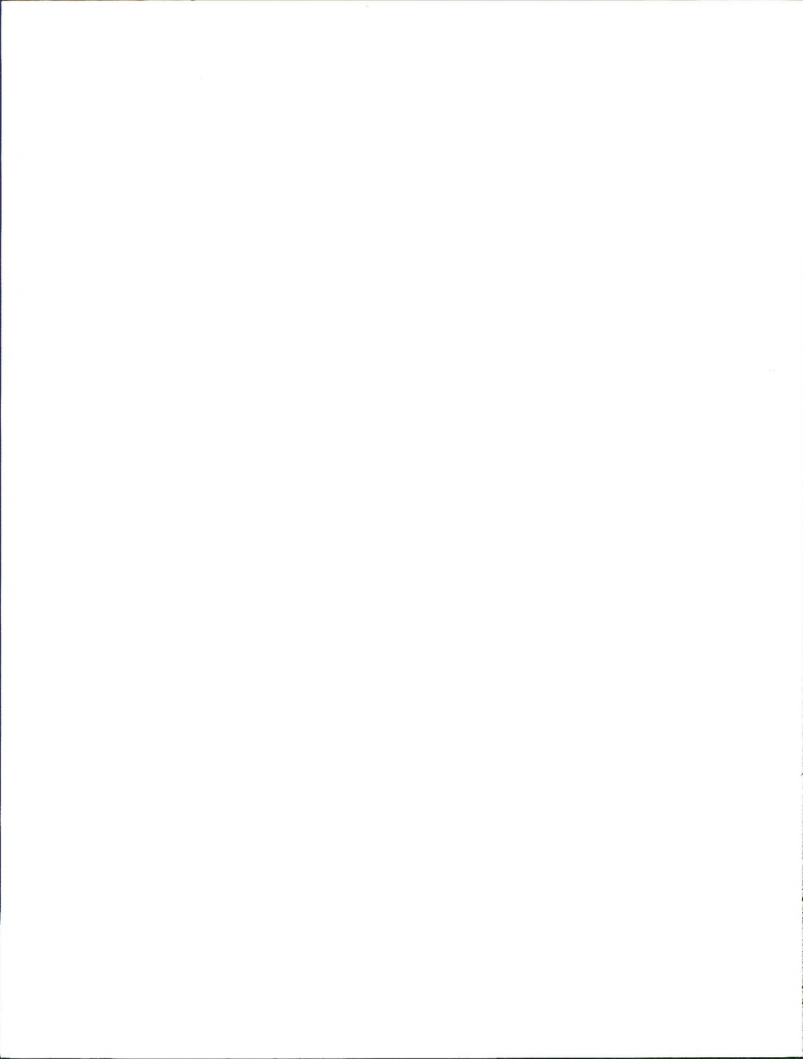
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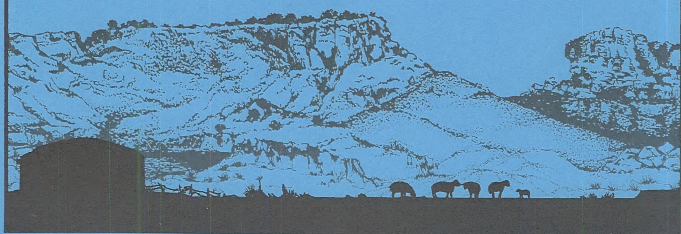
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Index



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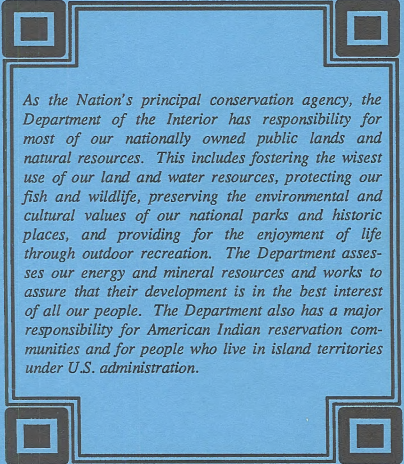
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Index

Acquisition Zones	2-2, 3-2, 3-14
Activity Plans	3-24, 4-7
Affected Environment	3-1, 3-18
Ah-shi-sle-pah Wilderness Study Area	1-16, 3-3, 3-37
Alternative Formulation	i-4
Ambient Air Quality	3-27
Bald Eagle Wintering Area	2-4, 2-6
Bisti Wilderness	1-16, 3-3, 3-30, 3-37
Coal Screens	i-7
Colorado River Salinity Program	1-12
Continuing Management Guidance	1-1, 3-2
Cooperative Agreements	1-15
Cultural Resource Management Plans	1-16
Current Management Alternative	3-2
De-na-zin Wilderness	1-1, 3-28, 3-31, 3-37
Emergency Closure	1-19
Environmental Assessment	1-6, 1-10
Environmental Consequences	3-1
Exchange Zone	i-6, 3-9, 3-13, 3-14
Federal Land Policy and Management Act (FLPMA)	i-1, i-6
Federal Register	4-1, 4-6
Federal Reserved Water Rights	1-11
Fire Management Program	1-13
Formal Consultation	4-5
Habitat Management	1-14, 1-15
Interdisciplinary Team	4-1
Issues	i-3, 1-5, 2-2, 3-2
Management Framework Plan	i-1
Management Situation Analysis	i-3, 1-1, 3-18, 4-1
Memorandum of Understanding	3-4, 3-21
Mineral Estate	i-1
Mineral Resource	3-19
Multiple Use	3-2
Multiple Use Screens	3-9, 3-11
National Environmental Policy Act (NEPA)	i-1, 3-2
National Register of Historic Places	1-16, 3-35
No Action Alternative	3-2
ORV Designations	i-7, 1-8, 2-8, 3-10, 4-13
Outdoor Recreation Opportunities	1-9, 3-37
Paleontological Resources	1-18, 3-35, 3-36
Planning Area	i-1, i-2

Planning Criteria	3-9
Planning Process	1-3, 1-4
Planning Regulations	4-6
Preferred Alternative	3-2
Public Land	1-7, 1-9, 2-2
Public Participation	1-9, 1-18, 4-1, 4-6, 4-7
Public Surface	1-7
Ranch Budgets	3-38
Recreation and Public Purposes	1-23
Research Natural Area (RNA)	1-3, 3-36
Resource Conservation Alternative	3-4
Resource Production Alternative	3-11
Retention Zone	1-6, 3-9
Right-of-Way Corridors and Windows	i-8, 2-12, 3-10
Riparian Habitat Areas	3-29
Saleable Minerals	3-20
San Juan River Regional Coal EIS	i-7, 1-2, 2-7, 3-20, 4-12
Selective Management Categories	1-4
Special Management Areas	1-7, 1-13, 2-4, 3-3
Subsurface Minerals	i-1
Surface Owner Consultation	3-9, 3-11, 3-16
Timber Management Plan	1-10
Unauthorized Occupancy	1-7
Unsuitability Criteria	3-9, 3-11, 3-16
Visual Resource Management (VRM)	1-13
Watershed Activity Plans	1-11, 1-12
Wilderness Study Area	1-13
Wildlife	1-15
Wilderness	i-7, 1-1, 1-3
Woodlands	1-10, 1-11



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